TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1899.

No. 293.

THE CONSOLIDATED CANAL COMPANY, APPELLANT,

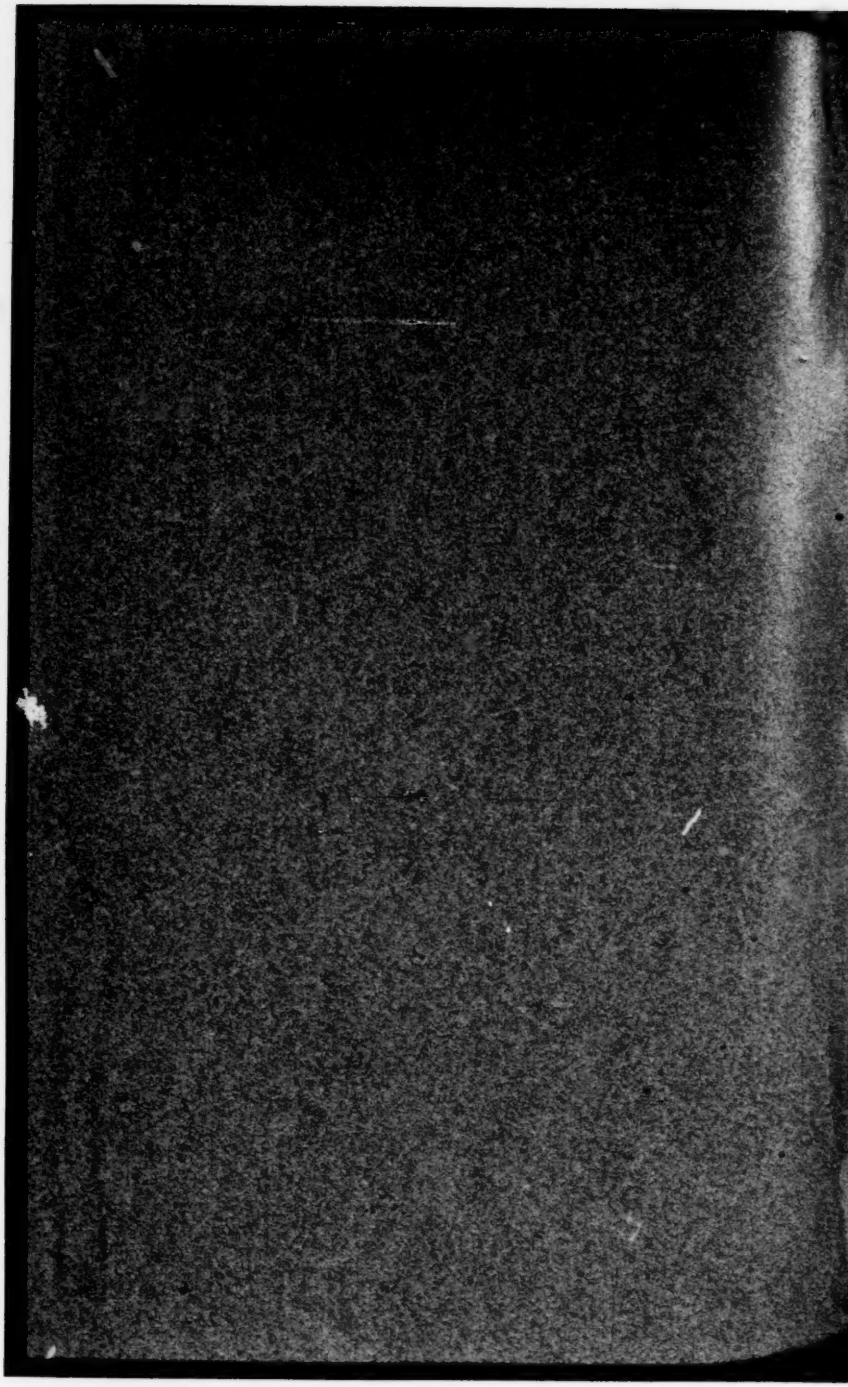
vs.

THE MESA CANAL COMPANY.

APPEAL FROM THE SUPREME COURT OF THE TERRITORY OF ARIZONA.

FILED JANUARY 8th, 1900.

(17,285.)



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INDEX.

	Original.	Print.
Transcript from district court	1	1
Complaint	1	1
Summons	5	3
Sheriff's return	6	3
Answer	7	4
Amended answer	8	5
Defendant's Exhibit 1—Agreement between the Mesa Canal Company and A. J. Chandler, December 14, 1889	12	6
Notice of Mesa Canal Company to Consolitated Canal Company and A. J. Chandler, May 1, 1894	20	11
Plaintiff's Exhibit A—Agreement between the Mesa Canal Company and A. J. Chandler, January 10, 1891	21	12
Judgment	30	16
Clerk's certificate to judgment-roll	31	16
Motion for new trial	32	17
Minute entries of trial, &c.	33	17
Order denying injunction and finding for defendant	36	19
Order overruling motion for new trial, &c	36	19
Memorandum of costs and disbursements	37	20

JUDD & DETWEILER, PRINTERS, WASHINGTON, D. C., JUNE 26, 1899.

	Original.	Print.
Bond on appeal	38	20
Reporter's transcript of evidence	41	22
Testimony of J. W. Kincaid	44	24
W. H. Coad	49	26
W. A. McGinnis	96	51
W. H. Coad (resumed)	107	57
Samuel A. Davidson	116	62
William M. Newell	130	69
William Kimball	142	76
Charles B. Lewis	148	79
Charles C. Dana	154	82
Hiram S. Peterson	157	84
William Christman	158	84
A. J. Chandler	162	86
S. Davidson (recalled)	196	105
Plaintiff rests	197	105
Testimony of F. P. Trott	198	106
John Pomeroy	247	131
J. F. Lewis	255	136
E. W. Wilbur	263	140
J. W. Le Baron	271	144
W. H. Wallace	283	151
Joseph A. Stewart	291	155
W. L. Serrine	296	158
Sylvester Moote	306	163
George W. Lewis	312	166
Sylvester Moote (recalled)	316	168
Hiram B. Morris	317	169
W. H. Coad (recalled)	319½	170
W. A. McDonald	320	171
Hiram B. Morris (recalled)	322	172
Defendant rests	323	173
Testimony of Doctor Chandler (recalled)	323	173
W. H. Coad (recalled)	328	176
—— Peterson (recalled)	333	178
Both sides rest	334	179
Plaintiff's Exhibit A—Agreement between the Mesa Canal Company and A. J. Chandler, January 10, 1891	335	179
B—Notice of location of water right, &c., by A. J. Chandler, July 19, 1890	343	183
C—Notice of appropriation of water by A. J. Chandler, June 15, 1893	345	184
No. 3—Map (not set out)	347	185
Defendant's Exhibit No. 1—Agreement between the Mesa Canal Company and A. J. Chandler, December 14, 1889	347	185
No. 2—Notice to the Consolidated Canal Company and A. J. Chandler, May 1, 1894	355	190
Court reporter's certificate	357	191
Certificate of clerk of district court	359	191

	Original	Print.
Order granting time to file briefs	360	192
Order setting cause for hearing	360	192
Order resetting cause for hearing	360	192
Order submitting cause	361	192
Judgment	361	193
Opinion	362	193
Motion for rehearing	370	197
Order denying motion for rehearing	375	200
Order fixing amount of bond on appeal	375	200
Notice of appeal	376	201
Order allowing appeal	377	201
Motion to allow findings, &c	377	201
Findings of fact	378	202
Conclusion of law	388	207
Citation (copy)	390	208
Assignment of errors	391	208
Appeal bond	392	209
Affidavit of C. F. Ainsworth	394	210
Letter of Judge Doan to C. F. Ainsworth, October 10, 1898	395	211
Clerk's certificate	397	211

1 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff,
vs.
THE MESA CANAL COMPANY, a Corporation, Defendant.

Complaint. Filed April 24th, 1896, at 12 m.

The above-named plaintiff complains of the above-named defendant and alleges:

That both plaintiff and defendant are corporations organized under the laws of the Territory of Arizona, having their offices and principal place of business in the county of Maricopa, Arizona Territory.

That both plaintiff and defendant were organized for the purpose of taking water from the Salt river and delivering the same to the consummers and users thereof along the line of their proposed and constructed canals.

That the defendant corporation, The Mesa Canal Company, being the owner and in possession of what was known as the Mesa canal, in Maricopa county, Arizona, did on the 10th day of January, 1891, enter into a written contract with one Alexander J. Chandler, by the terms of which said Alexander J. Chandler, his successors and assigns, should have the right to enter into possession of all that portion of the Mesa canal lying between what was known as

2 Ayers' head gates and the point on Salt river where said canal was taken out, and to rebuild, reconstruct, and enlarge said canal, and that thereafter said Alexander J. Chandler, his successors, heirs, or assigns, should have the control of that portion of said canal so proposed to be enlarged and reconstructed.

That thereafter said Alexander J. Chandler sold, assigned, and transferred all his right, title, and interest in and to said contract to this plaintiff, and that said Consolidated Canal Company entered into possession of said Mesa canal and reconstructed and enlarged the same on the terms and conditions in said contract specified and within the time therein mentioned, and that said Consolidated Canal Company has — ever since and is now in possession of all that portion of the Mesa canal between what is known as the division gates situated on section fourteen, township one north, of range five east, and the point on Salt river where said canal is taken out, to wit, section twenty-two, township two north, of range six east.

That said Consolidated Canal Company in the enlargement and reconstruction of said Mesa canal raised the grade of said canal at the point of the division gates aforesaid about five feet, and were to great expense in raising said grade; that said grade was raised for the purpose of carrying the water in said canal at a higher elevation, and thereby covering more and other lands which were impossible theretofore to be covered by said Mesa canal (also for the purpose of creating water power at said division gates).

That by reason of raising said canal and the elevation
3 aforesaid the Consolidated Canal Company did create and establish water power at said division gates on section fourteen, township one north, of range five east, aforesaid; that thereafter the Consolidated Canal Company put in machinery, to wit, a water wheel and feed-mill, for the purpose of grinding barley and other grains that might be brought to said mill for grinding; that said water power so created will average about 36-horse power. Said plaintiff was to great expense in creating said water power by means of raising the grade on its canal and putting in its wheels and machinery, to wit, the cost of over sixty thousand dollars.

That said plaintiff continued to deliver the water of the Mesa canal, at its division gates at section fourteen aforesaid, to said Mesa canal under its contract aforesaid and now continues to so deliver to the Mesa canal aforesaid all the water which it is entitled to under said contract.

That said Mesa Canal Company, on or about the 21st day of March, 1896, in the night-time of said day, entered in and upon said Mesa canal, at about the distance of seventy-five feet below plaintiff's division gates aforesaid, and there constructed and built a dam to the height of about three and one-half feet for the purpose of backing up the water against the plaintiff's division gates.

That by reason of said dam, so constructed as aforesaid, plaintiff's water power has been entirely ruined and destroyed; that the flow in plaintiff's said canal has been greatly impeded, and the
4 capacity of said canal in carrying the water aforesaid has been diminished; that by reason of the backing up of said water against plaintiff's said head gates by means of said dam aforesaid the division gates of plaintiff are being undermined and will, unless said dam is taken out, be washed out and destroyed.

That this plaintiff has repeatedly requested said defendant to take out and remove said dam, so as to allow the water to flow into said Mesa canal as it had originally been allowed to flow at the time when plaintiff constructed its said water power and put in its machinery at the division gates aforesaid.

That said water power, as created and established by plaintiff as aforesaid, is capable of earning this plaintiff, over and above all costs and expense of managing and operating the same, at least the sum of fifteen dollars per day.

That the damage to said plaintiff by reason of the diminished flow of water in its said canal as aforesaid, caused by said dam placed in said canal by said defendant as aforesaid, cannot be estimated in dollars and cents.

That the damage to plaintiff by reason of the backing up of said water and washing of its said head gates and destruction of the same cannot at present be estimated or approximated.

That the total damage to plaintiff by reason of the destruction of its said water power, the impeding of the flow of water in its said canal, and the destruction of its said head gates is irreparable and cannot be compensated in money value.

That the defendant corporation has no property other than its interest in the canal aforesaid.

5 Wherefore plaintiff prays the judgment of this court that said defendant be perpetually enjoined and restrained from maintaining a dam in the said Mesa canal at the point aforesaid or at any place below plaintiff's division gates that will back up the water against plaintiff's said division gates and destroy or injure its said water power or impede the flow of water in plaintiff's said canal, and that until the final hearing of this cause said defendant be temporarily enjoined from maintaining its said dam or from backing up the water against plaintiff's said head gates and destroying its said water power and division gates or impeding the flow of water in its said canal, and that this plaintiff have and recover of the defendant its costs and disbursements incurred herein, and for such other and further relief as shall be just and equitable in the premises.

C. F. AINSWORTH &
THOS. D. BENNITT,
Att'ys for Plaintiff.

In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff, *vs.* THE MESA CANAL COMPANY, a Corporation, Defendant.	Summons. Filed April 25th, 1896.

Action brought in the district court of the third judicial district of the Territory of Arizona in and for Maricopa county, in the office of the clerk of said district court.

6 In the name of the Territory of Arizona to The Mesa Canal Company, a corporation, defendant, Greeting:

You are hereby summoned and required to appear in an action brought against you by the above-named plaintiff in the district court of the third judicial district of the Territory of Arizona in and for Maricopa county, and answer the complaint therein filed with the clerk of this said court, at Phœnix, in said county, within ten days after the service upon you of this summons, if served in this said county, or if served out of this said county and within this said judicial district, then within twenty days thereafter, or in all other cases within thirty days thereafter, the times above mentioned being exclusive of the day of service, or judgment by default will be taken against you.

Given under my hand and seal of the district court of the third judicial district of the Territory of Arizona in and for Maricopa county, this 24th day of April, A. D. 1896.

[District Court Seal.]

J. E. WALKER,
Clerk of said District Court.

OFFICE OF THE SHERIFF OF THE COUNTY OF MARICOPA.

I hereby certify that I received the within summons on the 24th day of April, A. D. 1896, at the hour 12.10 p. m., and personally served the same on the 24th day of April, A. D. 1896, on The Mesa Canal Company, it being the defendant named in said summons, by delivering to D. A. Spragg, president of said Mesa Canal Company, in the town of Mesa, county of Maricopa, a copy of said summons, to which was attached a true copy of the complaint men-
7 tioned in said summons.

Dated this 25 day of April, A. D. 1896.

L. H. ORME, *Sheriff*,
By J. T. GIBSON,
Deputy Sheriff.

Fees.

Service	$1.50
Copies	.60
Travel, 20 miles	6.00
Total	$8.10

In the District Court of the Third Judicial District of Arizona, County of Maricopa.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff,
vs.
THE MESA CANAL COMPANY, a Corporation, Defendant.

Answer. Filed May 4th, 1896.

I.

And now comes the defendant, The Mesa Canal Company, a corporation, and demurs to the complaint filed herein by the plaintiff, The Consolidated Canal Company, a corporation, for that the same does not state facts sufficient to constitute a cause of action, and prays to be dismissed with its costs.

STREET & FRAZIER,
Att'y- for Defendant.

II.

Should defendant's demurrer be overruled, it then answers further and denies each and every allegation of the complaint except the allegations that plaintiff, The Consolidated Canal Company, and the defendant, The Mesa Canal Company, are corporations
8 organized under the laws of the Territory of Arizona, having their offices and present place of business in Maricopa county, Arizona, and that both plaintiff and defendant were organized for the purpose of taking water from the Salt river and delivering the same to the consumers and users thereof along the line of their pro-

posed and constructed canals, which allegations defendant expressly admits.

Wherefore defendant prays that it be dismissed with its costs.

STREET & FRAZIER,
Att'y- for Defendant.

In the District Court of the Third Judicial District of the Territory of Arizona in and for Maricopa County.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff,
vs.
THE MESA CANAL COMPANY, a Corporation, Defendant.

Amended Answer. Filed December 8th, 1896.

I.

And now comes the defendant, The Mesa Canal Company, a corporation, and demurs to the complaint filed herein by the plaintiff, The Consolidated Canal Company, a corporation, for that the same does not state facts sufficient to constitute a cause of action, and asks to be dismissed with its costs.

STREET & FRAZIER,
Att'ys for Defendant.

9

II.

Should defendant's demurrer be overruled, it then answers further and denies each and every allegation of the complaint except the allegations that plaintiff, The Consolidated Canal Company, and defendant, The Mesa Canal Company, are corporations organized under the laws of the Territory of Arizona, having their offices and present places of business in Maricopa county, Arizona, and that both plaintiff and defendant were organized for the purpose of taking water from the Salt river and delivering the same to the consumers and users thereof along the line of their proposed and constructed canals; which allegations defendant expressly admits.

III.

And by leave of the court first had and obtained defendant further answers and alleges that under the contract which the said A. J. Chandler had with the Mesa Canal Company it was stipulated and agreed that the said Chandler should only have possession of the Mesa canal at a point called the Ayers head gate, and from there to the head of the canal, and it never was at any time agreed or stipulated that the said Chandler or the Consolidated Canal Company should have any rights whatever below the said Ayers head gate, which said Ayers head gate is 2,692 feet above the point where the division gates of the said Consolidated Canal Company and the Mesa Canal Company are situated, and whatever possession the Consolidated Canal Company now has or said A. J. Chandler now

has below the said Ayers head gate and between that point
10 and the division gates situated on section 14, T. one north, R. 5 east, is without any agreement or stipulation between them and the Mesa Canal Company, and without any greater or further right than the bare permission of the Mesa Canal Company.

And the defendant further alleges that if the grade of the Mesa canal below the Ayers head gate was raised by the Consolidated Canal Company or A. J. Chandler in the enlargement and reconstruction of the Mesa canal that such grade was not raised for the exclusive right or benefit of the Consolidated canal, but inured to the benefit of the Mesa canal as well, and that the said Mesa Canal Company have the right to receive and enjoy whatever benefits may arise from the raising of said grade, and it is the right of the Mesa Canal Company to cover more and other lands by virtue of the raising of said grade than had theretofore been covered by water running through the Mesa canal on its former grade, and they further specifically deny that the Consolidated canal did create and establish any water power at the division gates on sec. 14, T. one north, R. 5 east, and allege that whatever machinery or appliances were in position by the Consolidated Canal Company at the division gates or below was without any right or authority and against the rights of the Mesa Canal Company, and was an intrusion into and a trespass upon the rights of the Mesa Canal Company in having its water flow through and below the division gates unimpeded and unobstructed in any manner whatever.

Said defendants admit that on or about the 21st day of
11 March, 1896, at a point somewheres about 75 feet below the division gates aforesaid, they, the defendants, did construct or build a temporary check or dam for the purpose of forcing the water into a lateral ditch in order to irrigate the lands which lay under the Mesa canal, and were properly irrigable by means of water running through said Mesa canal below the division gates, but they allege that they built such dam or check only to a reasonable height, and only so high as was necessary to properly run the water into said lateral ditch; all of which these defendants say they *has* a right to do, and in doing so in no way trespassed upon the rights of the plaintiff, The Consolidated Canal Company, and they deny that by any such act or any acts connected therewith they in any manner injured the plaintiff or damaged it in any amount whatever or trespassed upon any of its rights.

Wherefore defendant prays that plaintiff's action be dismissed and defendants have judgment for their costs.

STREET & FRAZIER,
Att'ys for Defendant.

12 DEF'T'S EX. 1.

Agreement.

This article of agreement, made and entered into this fourteenth day of December, A. D. 1889, by and between the Mesa Canal Com-

pany, a corporation duly organized and legally existing under and by virtue of the laws of the Territory of Arizona, having its principal office and place of business at Mesa city in the county of Maricopa and Territory of Arizona, party of the first part, and A. J. Chandler of the city of Phœnix, in the county and Territory aforesaid, party of the second part, witnesseth :—

That, whereas, the said party of the first part is an irrigating corporation, and as such is now the owner operating the Mesa canal in said county and Territory.

And, whereas, said party of the second part desires to increase the size and capacity of said canal between the point in Salt river where the water is now taken out, or by consent of the directors of the Mesa Canal Company may hereafter be taken out, and a point in said Mesa canal known as "Ayers' head gate," so as to increase the flow of water through said portions of said canal as aforesaid, and for the purpose of the party of the second part, his associates and assigns, obtaining water thereby through said canal, and in order to have said canal increased in size, dimensions and capacity without cost or expense to said party of the first part, and without in any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal and the water flowing through said canal, except as hereinafter provided.

13 And, whereas, at a meeting of the stockholders of said Mesa Canal Company, the party of the first part, duly called and legally held at the office in Mesa city aforesaid on the fourteenth day of December, A. D. 1889, the said stockholders by vote thereof, viz: 298 votes for and 10 votes against, direct that this agreement in terms, words and figures as hereinafter expressed should be by said Mesa Canal Company entered into with the said A. J. Chandler, his associates and assigns, and that the president and secretary of the said Mesa Canal Company should execute said agreement on the part of said canal company under the corporate name and seal and sign the same as president and secretary thereof:

Now, therefore, the Mesa Canal Company, party of the first part, for and in consideration of the sum of one dollar to it in hand paid by the party of the second part, the receipt whereof is hereby acknowledged, and for the further consideration and purposes herein contained and expressed, does for itself and for its successors or assigns hereby grant unto the said A. J. Chandler, his associates, heirs or assigns, forever, the following rights and privileges upon the terms and conditions herein expressed, viz:

That the said A. J. Chandler, his associates, heirs or assigns, shall have the right and privileges of entering upon any and all of the following portions of said Mesa canal at any time prior to the first day of March, A. D. 1891, for the purpose of widening and enlarging and increasing the size and capacity of said Mesa canal between the point in Salt river where the water is now or may hereafter

14 be taken out for said canal, and a point on said canal known as "Ayers' head gate," and enlarge and increase the size and dimensions of the main dam and head gates at the point of commencement of said canal in Salt river, and enlarge and increase the

size and capacity of said Mesa canal so that the same when so enlarged and increased in size shall have a carrying capacity in addition to its present carrying capacity not exceeding forty thousand inches of water miners' measurement, nor less than ten thousand inches of water miners' measurement, and said enlargement shall be fully made and completed by the thirtieth day of December, A. D. 1891. The present carrying capacity of said Mesa canal for the purpose of this agreement shall be seven thousand inches miners' measurement.

All the cost and expense of enlarging and increasing the size of said dam, head gate and canal as aforesaid shall be borne and paid by the party of the second part, his associates, heirs or assigns, forever. And said enlargement shall be made without in any way interfering with any of the rights, titles, interests or privileges of said party of the first part in and to the said canal and the water flowing through said canal, except as hereinafter provided.

The party of the first part hereby reserves the right to further enlarge said portion of the Mesa canal whenever they deem it necessary to do so, provided such enlargement shall not interfere with or lessen the rights or privileges herein granted to the party of the second part, his associates or assigns.

The said party of the second part, his associates or assigns,
15 shall have the right to turn the water out of said Mesa canal for the purpose of enlarging the same as aforesaid from time to time as the work may progress or require; but said water shall not be turned out of said canal for a period exceeding fifteen days at any one time; after being turned out for fifteen days it shall be turned in again and remain in said canal for a period of ten days each time it is turned in, unless permission is granted by the directors of the Mesa Canal Company to turn the water out of said canal for a longer period than the time above specified; provided, it shall not be turned out at all between the first day of March and the first of November without the consent of the directors of the Mesa Canal Company.

Said party of the second part, his associates or assigns, shall in enlarging said main dam, head gates and canal as aforesaid, in all respects enlarge said dam, head gates and canal in a good, substantial and workmanshiplike manner, according to the most approved methods of constructing and building irrigating canals.

All suits, liabilities, costs, expenses or judgments, and all damages or loss incurred or sustained by the party of the first part caused by said enlargement, shall be bourne by the party of the second part, his associates or assigns forever, and all suits or proceedings against the party of the first part by reason of said enlargement to be defended at the expense of the party of the second part.

It is expressly understood and agreed by the parties hereto, their successors or assigns, that at all times when there is an
16 abundance of water in Salt river liable to appropriation and flowage through said canal when so enlarged, then and at all such times the said party of the first part shall have the right to use from said canal in addition to the amount hereinbefore speci-

fied as the capacity of said canal two thousand inches of water miners' measurement.

The management and control of the canal between the point known as "Ayers' head gate" to and including the dam in Salt river when so enlarged as aforesaid shall be in the party of the second part, his heirs, associates or assigns, provided: that the party of the second part, his heirs, associates or assigns, shall before he or they are entitled to receive or use any water through said canal, first deliver to the party of the first part, their heirs or assigns, at the point in said Mesa canal known as "Ayers' head gate," and shall continue to deliver, the seven thousand inches of water miners' measurement above expressed as the carrying capacity of said Mesa canal, or such portion thereof as may be apportioned to said Mesa canal by decree of any court. Provided, the stockholders who are now using or who may hereafter use water above the "Ayers head gate" shall have their water delivered to them as at present above the "Ayers head gate" aforesaid, or said stockholders shall have their water delivered to them at the "Ayers head gate" with the other stockholders, as they may demand; provided, further, that the water shall be delivered to the party of the first part after the completion of said canal as aforesaid for a period of five years
17 without cost to the party of the first part, their successors or assigns, and thereafter for a sum not exceeding three dollars per share per year forever, to be paid for in the same manner as they now pay for the same.

It is hereby agreed that if any disagreement shall arise between the parties hereunto in relation to the division of the water and any suit shall be instituted thereon by either party hereunto, the parties hereby mutually request the judge of the court in which such suit shall be pending to forthwith appoint some suitable and disinterested party to make the division of the water according to the terms of this agreement until said suit shall be settled either by decree of the court or agreement of the parties hereunto.

It is further expressly agreed by the party of the second part that in case of any break in the canal or dam aforesaid, thereby causing the water to be turned out of said canal, then and in every such case the said party of the second part, his heirs or assigns, shall forthwith without delay cause said dam or canal to be repaired and the water turned into said canal as soon thereafter as shall be possible so to do.

Provided further: that if the said party of the second part, his associates, heirs or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement, and shall be notified by the directors of the Mesa Canal Company of such failure or neglect to carry out the terms of this agreement, and shall still neglect to carry out the terms of this agreement for a period of ten days thereafter, or in such case as a
18 break in the canal, head gates and dam whereby the water is turned out for a period of five days, then and at all such times it is hereby agreed by the party of the second part, his heirs, associates or assigns, that the directors of the Mesa Canal Company

shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, and the same shall become the property of the Mesa Canal Company and shall so remain until the party of the second part, his associates, heirs or assigns, shall fully comply with the terms and requirements of this agreement, and then shall revert back to the party of the second part, his associates, heirs or assigns, and shall be and remain in the party of the second part, his associates, heirs or assigns, so long as the terms of this agreement shall be by them complied with.

This agreement shall not give or convey to the party of the second part, his associates, heirs or assigns, any title or ownership in or to the capital stock of said Mesa Canal Company, but shall only convey such privileges and rights as are herein mentioned.

The name of the Mesa canal shall not be changed, but shall always be known as the Mesa canal.

In witness whereof the said Mesa Canal Company, party of the first part, has this the twenty-first day of December, A. D. 1889, caused its corporate name to be hereunto subscribed and its corporate seal affixed and these presents signed by its president and secretary, and the said party of the second part has signed
19 these presents this twenty-first day of December, A. D. 1889.

THE MESA CANAL COMPANY,
By WILLIAM N. STANDAGE, *President.*

[Corporate Seal.]

THE MESA CANAL COMPANY,
By WILLIAM J. LE BARON, *Secretary.*
ALEXANDER J. CHANDLER.

TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, J. W. Evans, a notary public in and for said county, on this day personally appeared William N. Standage, the president of the Mesa Canal Company, and William J. Le Baron, the secretary of the Mesa Canal Company, known to me to be the persons whose names are subscribed to the foregoing instrument as such president and secretary, and each acknowledged to me that the corporate name was subscribed to said instrument and the corporate seal affixed by order of the stockholders of said corporation, and that they and each of them signed said instrument as such president and secretary by like order of the stockholders, and that they executed said instrument in behalf of said corporation for the use, purpose, and consideration therein expressed.

Given under my hand and seal of office this 21st day of December, A. D. 1889.

[NOTARY SEAL.]

J. W. EVANS,
Notary Public.

TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, J. W. Evans, a notary public in and for said
20 county, on this day personally appeared A. J. Chandler, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this 21st day of December, A. D. 1889.

[NOTARY SEAL.] J. W. EVANS,
Notary Public.

Filed December 12th, 1896.

J. E. WALKER, *Clerk,*
By C. H. KNAPP,
Deputy Clerk.

MESA, A. T., *May 1st*, 1894.

To the Consolidated Canal Company and A. J. Chandler:

Pursuant to a resolution of the board of directors of the Mesa Canal Company, duly passed at a regular meeting of the board of directors of said Mesa Canal Company, held at the office of said company on the 13th day of April, 1894, a majority of the directors of said company being present and voting, you are hereby notified that the said Mesa Canal Company hereby demand immediate possession of all that portion of that certain irrigating canal and ditch, known as the Mesa canal, situated in the county of Maricopa and Territory of Arizona which lies between that point on said Mesa canal known as "Ayers' headgate" and the point in said canal where the division gates of the Consolidated Canal Company are now located, said last-named point being at or near the N. E.
21 corner of the N. W. quarter of sec. No. 14, township No. 1 N., of range 5 east, Gila & Salt River meridian.

THE MESA CANAL COMPANY,
By W. N. STANDAGE, *Pres.*
[NOTARY SEAL.] E. W. WILBUR, *Sec'y.*

CONSTABLE'S OFFICE, MESA PRECINCT, *July* 26, 1894.

I hereby certify that I received the within papers on 26 day of July, 1894, and served the same by delivering a copy of the same to A. J. Chandler on 26 day of July, 1894.

C. B. LEWIS, *Constable.*

Subscribed and sworn to before a notary public this 26th day of July, 1894.

E. W. WILBUR,
Notary Public.
[NOTARY SEAL.]

Def't's Ex. 2.
Filed December 12th, 1896.

J. E. WALKER, *Clerk,*
By C. H. KNAPP,
Deputy Clerk.

"Pl'ff's Ex. A."

Contract.

Mesa Canal Company with A. J. Chandler. } Filed December 12th, 1896. J. E. Walker, clerk, by C. H. Knapp, deputy clerk.

January 10th, 1891.

This article of agreement, made and entered into this 10th day of January, A. D. 1891, by and between the Mesa Canal
22 Company, a corporation duly organized and legally existing under and by virtue of the laws of the Territory of Arizona, having its principal office and place of business at Mesa city, in the county of Maricopa and Territory of Arizona, party of the first part and A. J. Chandler, of the city of Phœnix, in the county and Territory aforesaid, party of the second part.

Witnesseth: That whereas, the said party of the first part is an irrigating corporation, and as such is now the owner operating the Mesa canal in said county and Territory.

And, whereas, said party of the second part desires to increase the size and capacity of said canal between the point in Salt river where the water is now taken out, or by consent of the directors of the Mesa Canal Company may hereafter be taken out, and a point in said Mesa canal known as "Ayers' head gate" so as to increase the flow of water through said portions of said canal as aforesaid, and for the purpose of the party of the second part, his associates and assigns, obtaining water thereby through said canal, and in order to have said canal increased in size, dimensions and capacity without cost or expense to the said party of the first part, and without in any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal and the water flowing through said canal, except as hereinafter provided.

And, whereas, at a meeting of the stockholders of said Mesa Canal Company, the party of the first part, duly called and legally held at the office in Mesa city aforesaid, on the 10th day of Jan-
23 uary A. D. 1891, the said stockholders, by vote thereof, viz: 221 votes for and 130 votes against, direct that this agreement in terms, words and figures as hereinafter expressed should be by said Mesa Canal Company entered into with the said A. J. Chandler, his associates and assigns, and that the president and secretary of the said Mesa Canal Company should execute said agreement on the part of said canal company under the corporate name and seal and sign the same as president and secretary thereof.

Now therefore, the Mesa Canal Company, party of the first part, for and in consideration of the sum of one dollar to it in hand paid by the party of the second part, the receipt whereof is hereby acknowledged, and for the further consideration and purposes herein contained and expressed, does for itself and for its successors or assigns, hereby grant unto the said A. J. Chandler, his associates,

heirs or assigns, forever, the following rights and privileges, upon the terms and conditions herein expressed, viz:

That the said A. J. Chandler, his associates, heirs or assigns, shall have the right and privilege of entering upon any and all of the following portions of said Mesa canal at any time prior to the first day of March, A. D. 1891, for the purpose of widening and enlarging and increasing the size and capacity of said Mesa canal between the point in Salt river where the water is now, or may hereafter be taken out for said canal, and a point on said canal known as "Ayers' head gate," and enlarge and increase the size and dimensions of the main dam and head gates at the point of commencement of
24 said canal in Salt river, and enlarge and increase the size and capacity of said Mesa canal so that the same, when so enlarged and increased in size, shall have a carrying capacity in addition to its present carrying capacity not exceeding 40,000 inches of water, miners' measure, now less than 10,000 inches of water, miners' measurement, and the said enlargement shall be fully made and completed by the 30th day of December A. D. 1891.

The present carrying capacity of said Mesa canal for the purpose of this agreement shall be 7,000 inches, miners' measurement.

All the cost and expense of enlarging and increasing the size of said dam, head gate and canals as aforesaid, shall be borne and paid by the party of the second part, his associates, heirs and assigns forever. And said enlargement shall be made without in any way interfering with any of the rights, titles, interests or privileges of said party of the first part in and to the said canal, and the water flowing through the said canal, except as hereinafter provided.

The party of the first part hereby reserves the right to further enlarge said portions of the Mesa canal whenever they deem it necessary to do so, provided such enlargement shall not interfere with or lessen the rights or privileges herein granted to the party of the second part, his associates or assigns.

The said party of the second part, his associates or assigns, shall have the right to turn the water out of said Mesa canal for the purpose of enlarging the same as aforesaid from time to time as the work may progress or require, but said water shall not be turned out of said canal for a period exceeding fifteen days at any
25 one time, after being turned out for fifteen days it shall be turned in again, and remain in said canal for a period of ten days each time it is turned in, unless permission is granted by the directors of the Mesa Canal Company to turn the water out of said canal for a longer period than the time above specified; provided, it shall not be turned out at all between the first day of March and the first of November without the consent of the directors of the Mesa Canal Company.

Said party of the second part, his associates and assigns shall, in enlarging said main dam, head gates and canals as aforesaid, in all respects enlarge said dam, head gates and canal in a good, substantial and workmanlike manner, according to the most approved methods of constructing and building irrigating canals.

All suits, liabilities, costs, expenses of judgments, and all damages

or loss incurred or sustained by the party of the first part caused by said enlargement, shall be borne by the party of the second part, his associates or assigns forever, and all suits or proceedings against the party of the first part by reason of said enlargement to be defended at the expense of the party of the second part.

It is expressly understood and agreed by the parties hereto, their successor or assigns, that at all times when there is an abundance of water in Salt river liable to appropriation and flowage through said canal when so enlarged, then, and at all such times the said party of the first part shall have the right to use from said canal in
26 addition to the amount hereinbefore specified as the capacity of said canal, 2,000 inches of water, miners' measurement.

The management and control of the canal between the point known as "Ayers' head gate" to, and including the dam in Salt river when so enlarged as aforesaid shall be in the party of the second part, his heirs associates or assigns, provided: that the party of the second part, his heirs, associates or assigns, shall before he or they are entitled to receive or use any water through said canal, first deliver to the party of the first part, their heirs or assigns, at the point in said Mesa canal known as "Ayers' head gate," and shall continue to deliver, the 7,000 inches of water, miners' measurement above expressed as the carrying capacity of said Mesa canal, or such portion thereof as may be apportioned to said Mesa canal by decree of any court. Provided, the stockholders who are now using, or who may hereafter use, water above the "Ayers head gate" shall have their water delivered to them as at present above the "Ayers head gate" aforesaid, or said stockholders shall have their water delivered to them at the "Ayers head gate" with the other stockholders, as they may demand: Provided said Mesa Canal Company further agrees, that in consideration of the said A. J. Chandler, his associates or assigns delivering said water at the aforesaid point of delivery within the time specified to pay to the said A. J. Chandler, his associates or assigns, the annual rental for said 7,000 inches of water forever at $8.75 (eight and $\frac{75}{100}$ dollars) per share of stock, payable semi-annually.

27 It is hereby agreed that if any disagreement shall arise between the parties hereunto in relation to the division of the water and any suit shall be instituted thereon by either party hereunto, the parties hereby mutually request the judge of the court in which such suit shall be pending to forthwith appoint some suitable and disinterested party to make the division of the water to the terms of this agreement, until said suit shall be settled, either by decree of the court, or agreement of the parties hereunto.

It is further expressly agreed by the party of the second part that in case of any break in the canal, or dam aforesaid, thereby causing the water to be turned out of said canal, then, and in every such case the said party of the second part, his heirs or assigns shall forthwith, without delay, cause said dam or canal to be repaired, and the water turned into said canal as soon thereafter as shall be possible to do so.

Provided, further: that if the said party of the second part, his

associates heirs or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement, and shall be notified by the directors of the Mesa Canal Company of such failure or neglect to carry out the terms of this agreement, and shall still neglect to carry out the terms of this agreement for a period of ten days thereafter, or in such case as a break in the canal, head gates and dam whereby the water is turned out for a period of five days, then, and at all such times it is hereby
28 agreed by the party of the second part, his heirs associates and assigns, that the directors of the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, and the same shall become the property of the Mesa Canal Company, and shall so remain until the party of the second part, his associates, heirs or assigns, shall fully comply with the terms and requirements of this agreement, and shall then revert back to the party of the second part, his associates, heirs or assigns, and shall be and remain in the party of the second part, his associates, heirs or assigns, so long as the terms of this agreement shall be by them complied with.

This agreement shall not give or convey to the party of the second part, his associates, heirs or assigns, any title or ownership in or to the capital stock of said Mesa Canal Company but shall only convey such privileges and rights as are herein mentioned.

The name of the Mesa canal shall not be changed, but shall always be known as the Mesa canal.

In witness whereof the said Mesa Canal Company, party of the first part, has this the 13 day of January, A. D. 1891, caused its corporate name to be hereunto subscribed and its corporate seal affixed and these presents signed by its president and secretary, and the said party of the second part has signed these presents this 13 day of January, 1891.

THE MESA CANAL COMPANY,
By WILLIAM N. STANDAGE, *President.*
THE MESA CANAL COMPANY,
By WILLIAM J. LE BARON, *Secretary.*
ALEXANDER J. CHANDLER.

29 TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, Geo. Passey, a notary public in and for said county, on this day personally appeared William N. Standage, the president of the Mesa Canal Company, and William J. Le Baron, the secretary of the Mesa Canal Company, known to me to be the persons whose names are subscribed to the foregoing instrument as such president and secretary, and each acknowledged to me that the corporate name was subscribed to said instrument and the corporate seal affixed by order of the stockholders of said corporation, and that they and each of them signed said instrument as such president and secretary by like order of the stockholders, and that they executed said instruments in behalf of said corporation for the use, purpose, and consideration therein expressed.

Given under my hand and seal of office this 13th day of January, A. D. 1891.

____ ____,
Notary Public.

TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, Geo. Passey, a notary public in and for said county, on this day personally appeared A. J. Chandler, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this 13th day of January, A. D. 1891.

GEO. PASSEY,
Notary Public.

30 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

CONSOLIDATED CANAL COMPANY, a Corporation,
vs.
MESA CANAL COMPANY, a Corporation. } Judgment. Filed March 1st, 1897, at 9 o'clock a. m.

This cause coming on for trial on the 11th day of December, A. D. 1896, before the court, sitting without a jury, C. F. Ainsworth and John D. Pope, Esquires, appearing as attorneys for plaintiff, and Street & Frazier appearing as attorneys for defendant, and the parties being present also with their witnesses, the trial was proceeded with, and on the 11th, 12th, and 14th days of December, 1896, witnesses were examined and testified on the part of plaintiff and on the part of defendant.

And the trial being ended and the cause being submitted, the court took the same under advisement.

And now, on this first day of March, 1897, the court, being fully advised in the premises, does adjudge and decree that plaintiff be denied an injunction, as prayed for in his complaint; that he take nothing by his complaint, and that defendant, The Mesa Canal Company, a corporation, have and recover of the plaintiff, The Consolidated Canal Company, a corporation, a judgment for their costs in the cause expended, taxed at one hundred thirty-seven and $\frac{70}{100}$ dollars. Done in open court this 1st day of March, 1897.

A. C. BAKER, *Judge.*

31 In the District Court, Third Judicial District, of the Territory of Arizona in and for the County of Maricopa.

CONSOLIDATED CANAL COMPANY, Plaintiff,
against
MESA CANAL COMPANY, Defendant.

I, the undersigned, clerk of the district court of the third judicial district of Arizona Territory in and for Maricopa county, do hereby

certify the foregoing to be a true copy of the judgment entered in the above-entitled action and recorded in Judgment Book F of said court, at page 94; and I further certify that the foregoing papers, hereto annexed, constitute the judgment-roll in said action.

Witness my hand and seal of the district court this 1st day of March, A. D. 1897.

J. E. WALKER, *Clerk.*

32 In the District Court of the Third Judicial District of the Territory of Arizona in and for Maricopa County.

THE CONSOLIDATED CANAL COMPANY, Plaintiff, *vs.* THE MESA CANAL COMPANY, Defendant. } Motion for New Trial. Filed March 2nd, 1897.

Comes now the plaintiff, The Consolidated Canal Company, and respectfully moves the court to vacate the judgment rendered herein and grant this plaintiff a new trial for the following reasons, to wit:

I.

That the evidence does not support the judgment.

II.

That the court erred in admitting evidence in behalf of defendant over the objection of this plaintiff.

III.

That the court erred in rejecting evidence in behalf of this plaintiff; to which ruling the plaintiff duly excepted.

IV.

That the court erred in denying the plaintiffs a perpetual injunction against defendant as prayed for in the complaint.

Respectfully submitted.

C. F. AINSWORTH &
JOHN D. POPE,
Attorneys for Plaintiff.

33 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

THE CONSOLIDATED CANAL COMPANY *vs.* THE MESA CANAL COMPANY. } No. 2606.

Be it remembered that on Friday, November 27th, 1896, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden, the above-entitled cause coming on regular for trial, the parties to this cause being present in open court—

The following record of the case for this day was made, to wit:

Title of Cause.

Set for trial Friday, December 11th, 1896.

Be it remembered that on Friday, December 11th, 1896, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden, the above-entitled cause coming on regularly for trial, the parties to this cause being present in open court—

The following record of the case for this day was made, to wit:

Title of Cause.

This cause came regularly on for trial, plaintiff appearing by its counsel, C. F. Ainsworth, Esq., and the defendant appear-
34 ing by its counsel, Messrs. Street & Frazier. On motion, Hon. Jno. D. Pope was added as counsel for plaintiff. On motion, leave was granted plaintiff to amend complaint by interlineation.

On complaint being read, it is ordered by the court that a trial by jury be waived and cause tried by the court. The answer was then read to the court by defendant's counsel.

J. W. Kincaid, W. H. Code were sworn and examined as witnesses for the plaintiff and cross-examined by the defendant, and pending the introduction of witnesses for the plaintiff the court continued further hearing of this cause until tomorrow at 9 o'clock, to which time court adjourned.

Be it further remembered that on Saturday, December 12th, 1896, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden, the above-entitled cause coming on regularly for trial, the parties to this cause being present in open court—

The following record of the case for this day was made, to wit:

Title of Cause.

The trial of this cause was resumed, the plaintiff appearing by its counsel, C. F. Ainsworth and Jno. D. Pope, Esqrs., and the defendant appearing by its counsel, Messrs. Street & Frazier.

W. H. Code was recalled and examined by the plaintiff and cross-examined by defendant. W. A. McGinnis, S. A. Davidson, Wm. Newell, Wm. Kimball, C. B. Lewis, C. C. Dovine, H. S. Peterson, Wm. Crimson, and Dr. A. J. Chandler were called, sworn,
35 and examined as witnesses for the plaintiff and cross-examined by the defendants.

Plaintiff rests.

Trial of cause continued until tomorrow morning.

Court adjourned until tomorrow morning at 9 o'clock *a. m.*

Be it further remembered that on Monday, December 14th, 1896, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden, the above-entitled cause coming on regularly for trial, the parties to this cause being present in open court—

The following record of the case for this day was made, to wit:

Title of Cause.

The trial of this cause was resumed, the plaintiff appearing by its counsel, C. F. Ainsworth and Jno. D. Pope, Esqrs., and the defendants appearing by its counsel, Messrs. Street & Frazier.

Frank Trott, J. H. Pomeroy, J. T. Lewis, S. M. Wilbur, W. J. Le Baron, W. H. Wallace, J. A. Stewart, W. L. Lovine, Silvester Moote, Geo. W. Lewis, H. B. Morris, Jr., and W. A. McDonald were called, sworn, and examined as witnesses for the defendant and cross-examined by the plaintiff.

Defendant rests.

A. J. Chandler, W. H. Code, and H. Peterson were recalled and examined in rebuttal by the plaintiff.

The testimony being closed, cause submitted upon brief to be presented, plaintiff to file his brief by Monday, December 21st, 1896, and defendant to answer during the week.

36 Be it further remembered that on Monday, March 1st, 1897, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden, the above-entitled cause coming on regularly for trial, the parties to this cause being present in open court—

The following record of the case for this day was made, to wit:

Title of Cause.

This cause having heretofore been tried, submitted, and by the court taken under advisement, now at this time, after due consideration, it is ordered by the court that the injunction be, and is hereby, denied, and find for the defendant.

Be it further remembered that on Friday, April 30th, 1897, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden, the above-entitled cause coming on regularly for trial, the parties to this cause being present in open court—

The following record of the case for this day was made, to wit:

Title of Cause.

The motion for a new trial in this cause was presented and by the court overruled; to which ruling of the court plaintiff, by its counsel, duly excepted, and gave notice in open court of an appeal from the judgment and order overruling motion for a new trial to the supreme court of the Territory of Arizona.

37 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff,
vs.
MESA CANAL COMPANY, a Corporation, Defendant.

Memorandum of Costs and Disbursements of Defendant. Filed March 1st, 1897.

Disbursements.

Sheriff's fees	$
Clerk's fees	6.00
Witness-' fees	
Frank Trott, 3 days, 1 mile	6.30
J. H. Pomeroy, 3 days, 18 miles	11.40
J. F. Lewis, " "	11.40
S. M. Wilbur, " "	11.40
W. J. Le Baron, " "	11.40
W. H. Wallace, " "	11.40
J. A. Stewart, " "	11.40
W. L. Serrine, " "	11.40
Silvester Moot, " "	11.40
Geo. W. Lewis, " "	11.40
H. B. Morris, Jr., " "	11.40
W. A. McDonald, " "	11.40
	$137.70

TERRITORY OF ARIZONA, *County of Maricopa*, } ss:

Webster Street, being duly sworn, deposes and says that he is one of the attorneys for the defendant in the above-entitled action, and as such is better informed relative to the above costs and disbursements than the said defendant; that the items in the above memorandum contained are correct, and that the said disbursements have been necessarily incurred in the said action.

WEBSTER STREET.

Subscribed and sworn to before me this 1st day of March, 1897.
[District Court Seal.]

J. E. WALKER, *Clerk*,
By C. H. KNAPP, *Deputy*.

38 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff,
vs.
MESA CANAL COMPANY, a Corporation, Defendant.

No. 2606. Certified Copy of Bond on Appeal.

Whereas in the above numbered and entitled cause pending in the court aforesaid, at a regular term of said court, to wit, on the

first day of March, A. D. 1897, the said Mesa Canal Company, a corporation, recovered judgment against the said Consolidated Canal Company, a corporation, for the sum of one hundred thirty-seven and $\frac{70}{100}$ dollars ($137.70), being the costs of said suit; from which judgment the said Consolidated Canal Company has taken an appeal to the supreme court of this Territory:

Now, therefore, we, the Consolidated Canal Company, as principal, and A. J. Chandler and W. H. Code, as sureties, hereby bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents to pay to the said Mesa Canal Company, a corporation, the sum of six hundred dollars ($600), that being at least double the probable amount of the costs of the suit, both of the appellate court and the court below, as fixed by the clerk of this court.

39 The condition of the above obligation is such that if the said Consolidated Canal Company, a corporation, appellant, shall prosecute its appeal with effect in the supreme court and shall pay all costs which have accrued in the court below or which may accrue in the appellate court, then this obligation shall be void; otherwise to remain in full force and effect.

In witness whereof we have caused these presents to be executed in the corporate name by its president and signed by the sureties this 15th day of May, A. D. 1897.

CONSOLIDATED CANAL COMPANY,
By A. J. CHANDLER, *Its President.*
A. J. CHANDLER.
W. H. CODE.

TERRITORY OF ARIZONA, }
County of Maricopa, } *ss:*

A. J. Chandler and W. H. Code, being each first duly sworn, on oath, each for himself, doth depose and say that he is one of the sureties who executed the above and foregoing bond; that he is a resident freeholder of the county of Maricopa and Territory of Arizona, and that he is worth the sum of six hundred dollars over and above his just debts and liabilities, exclusive of property exempt from execution.

A. J. CHANDLER.
W. H. CODE.

Subscribed and sworn to before me this 15th day of May, A. D. 1897.

L. SALTER,
[L. S.] *Notary Public.*

40 I have fixed the probable amount of the costs of the suit, both of the appellate court and the court below, at three hundred dollars ($300), and approved the foregoing bond, this 17th day of May, A. D. 1897, both as to form and sufficiency of sureties.

J. E. WALKER,
Clerk of District Court.

(Endorsed:) 2606. District court, Maricopa county, Arizona. The Consolidated Canal Company, a corporation, plaintiff, *vs.* The Mesa Canal Company, a corporation, defendant. Bond on appeal. Filed May 17th, 1897. J. E. Walker, clerk.

TERRITORY OF ARIZONA, } *ss:*
County of Maricopa, }

I, Edwin S. Gill, clerk of the district court of the third judicial district of Arizona Territory in and for Maricopa county, hereby certify that I have compared the foregoing copy with the original bond on appeal in case 2606 in the above-entitled action, filed in my office on the 17th day of May, 1897, and that the same is a true copy of the original and of the whole thereof.

Witness my hand and the seal of said court this 13th day of December, 1897.

[District Court Seal.]

EDWIN S. GILL, *Clerk.*

41 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff, *vs.* THE MESA CANAL COMPANY, a Corporation, Defendant.	No. 2606. Reporter's Transcript of Evidence. Filed October 11th, 1897, at 3 o'clock p. m. Edwin S. Gill, Clerk, by C. H. Knapp, Deputy.

Tried to the court without the intervention of a jury on December 11th, 12th, and 14th, 1896, at Phœnix, A. T.

Before his honor A. C. Baker, judge.

Appearances: C. F. Ainsworth, Esqr., John D. Pope, Esqr., and T. D. Bennett, Esqr., attorneys for pl'ff; Messrs. Street & Frazier, att'ys for def't.

An action brought by plaintiff against the defendant to compel defendant to remove certain check gates in the Mesa canal which were alleged to back water in the Mesa canal to the division gates and destroy plaintiff's water power.

Proceedings reported by Chas. H. Holmes, court reporter.

42 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

THE CONSOLIDATED CANAL COMPANY *vs* THE MESA CANAL COMPANY. } Docket No., 2606.

Be it remembered that on Friday, December 11th, 1896, that being a regular judicial day of the November term, A. D. 1896, of the said court in and for the said county and Territory then holden,

the above-entitled cause coming on regularly for trial, the parties to this cause being present in open court and represented by their respective counsel—Messrs. Ainsworth, Pope and Bennett, attorneys for plaintiff, and Messrs. Street and Frazier, attorneys for defendant—to maintain by them the issues in said action joined, said cause proceeded to trial, and the respective parties offered in evidence the testimony and documentary evidence as hereinafter fully set out in this transcript of proceedings, the same being reduced from the court reporter's shorthand notes taken upon the trial of said cause:

That upon the introduction of said testimony and documentary evidence the following objections were interposed by counsel for the respective parties, rulings by the court made, and exceptions to said rulings taken and noted at the times and in the manner as hereinafter fully set forth in this transcript of evidence in said cause, which is as follows, to wit:

43 By the COURT: Are you ready in this cause of The Consolidated Canal Company against The Mesa Canal Company?

By Mr. AINSWORTH: We are ready on the part of plaintiff.

By Mr. STREET: We are ready on behalf of the defendant.

By the COURT: Very well, proceed with the case.

By Mr. AINSWORTH: I will move the court for the admission of Judge Pope, and ask to have his name added to that of counsel for plaintiff in this case.

By the COURT: Very well.

By Mr. AINSWORTH: Plaintiff will ask leave to amend the complaint in this case by inserting a different date. It says the 31st of December, whereas it should be on the 10th of January, 1891. It is simply a mistake which shows elsewhere.

By the COURT: Very well. Take the amendment. What about this jury?

By Mr. AINSWORTH: I will read the complaint. I think, your honor, this is not a case for the jury. (Reads complaint.)

By Judge STREET: We think the jury ought to be allowed to decide whether there are damages or a cause for damages—a rightful or a wrongful cause.

By the COURT: No. This is no case for a jury. The jury will be discharged. (Jury was discharged.)

The defendant made no further objection to the discharge of the jury.

By the COURT: Proceed with this case.

By Judge STREET: I will read the answer on behalf of the
44 defendant. (Reads answer.)

By Mr. AINSWORTH: Have you a copy of the contract?

By Judge STREET: I have a copy of it, but it is not the original.

By Mr. AINSWORTH: Then you have no objection to our using the copy. We will use it.

By Judge STREET: I reckon they are just the same.

By Judge AINSWORTH: We will offer in evidence the contract heretofore put into the complaint.

Defendant makes no objection unless it turns out to be not a correct copy. (Same duly admitted as Plaintiff's Exhibit A and filed as identified, copy hereto annexed, so marked.)

PLAINTIFF'S EXHIBIT A.

Testimony for Plaintiff.

J. W. KINCAID, Esqr., a witness, having been duly produced and sworn according to law, was examined and testified as follows, to wit:

Examined by C. F. AINSWORTH, Esqr.:

Q. What position do you now occupy, if any, at the present time?
A. I am county recorder of Maricopa county.
Q. And you have some of the records of your office with you?
A. Yes.
Q. What is this record here?
A. It is Book No. 32 of Deeds.
Q. Turn to page 585 of that record and see what you find there.
45 A. I have it here.
Q. What does that purport to be?
A. It is a contract between two parties. It seems to be a deed signed by A. J. Chandler to the Consolidated Canal Company, a corporation.
Q. Just read that record to the reporter.
A.—

This indenture made this 22nd day of March, 1892, between A. J. Chandler, of Maricopa county, Arizona, the party of the first part, and the Consolidated Canal Company, a corporation, organized under the laws of the Territory of Arizona, party of the second part, witnesseth:

That the said party of the first part for and in consideration of the sum of one dollar and other valuable considerations to *me* in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, have remised, released and quitclaimed and by these presents doth give, grant, convey, remise, release and quitclaim unto the said party of the second part, and to its successors and assigns forever, all the right, title, interest, claim and demand which the said party of the first part has in and to the following-described real estate and property situate in the county of Maricopa, Territory of Arizona, to wit:

That certain water location, dam site and head of canal and appropriation of fifty thousand miners' inches as per notice of appropriation bearing date July 19th, 1890, made by the party of
46 the first part and recorded in the office of the recorder of Maricopa county in volume one of Canals at page 206 and page 207 thereof.

Also all the right, title, interest of the party of the first part in

and to that certain contract bearing date January 13, 1891, executed by the Mesa Canal Company to the party of the first part together with all canals and ditches constructed by the party of the first part under said contract, and especially that certain canal constructed by said party of the first part from a point on section 22, township 2, north, range 6 east; thence in a southwesterly direction for a distance of about seven miles to the northeast corner of section 14, township one north, range 5 east; thence in a southerly direction about 6 miles; also in a westerly direction for about 10 miles together with all laterals connected therewith, and all machinery, dredgers, etc., used with the same.

To have and to hold the same together with all and singular the appurtenances and privileges thereunto belonging or in anywise appertaining and all the estate, right, title, interest and claim whatsoever of the said party of the first part either in law or in equity, in possession or expectancy to the only proper use benefit and behoof of the said party of the second part, its successors and assigns forever.

In witness whereof, the said party of the first part has hereunto set his hand and seal, the day and year first above written.

(Signed) A. J. CHANDLER. [SEAL.]

Signed, sealed and delivered in the presence of—
D. H. WALLACE.

47 TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, C. F. Ainsworth, a notary public in and for said county, on this day personally appeared A. J. Chandler, known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this 22nd day of March, 1892.

[SEAL.] (Signed) C. F. AINSWORTH.

Presented and filed for record by A. J. Chandler this 24th day of April, A. D. 1893, at 11.30 a. m.

NERI OSBORNE,
County Recorder,
By WILLIAM E. THOMAS, *Deputy.*

By Mr. AINSWORTH:

Q. Have you the water location notices?

A. Yes.

Q. What book are they in?

A. They are recorded in Book One of Canals, at pages —. There was two different ones given me to look up.

Q. Take the one on page 206 of Book One.

By Judge STREET: For what purpose do you offer this in evidence in this case?

Q. Simply to show that the title was transferred from Mr. Chandler to these people.

48 By Judge STREET: What title?

A. By Mr. AINSWORTH: The contract and the water location that went from Dr. Chandler to the canal company.

By Judge STREET: I cannot see where there would be any relevancy in any water location here. There are no water locations in dispute here and it encumbers the record, and we object to the introduction of them as immaterial and irrelevant.

By Judge POPE, counsel for plaintiff: Simply the water question—it is the appropriation—we want it in evidence and not disputed that Dr. Chandler made a transfer to the Consolidated Canal Company with the Mesa water and all of this other water.

By Judge STREET: If it becomes necessary we will not object to it, but we do object to it now as having any tendency to prove any of the issues here in this case.

By Judge POPE: We claim that they have destroyed our water power by backing up the water in our canal.

By Mr. AINSWORTH: We will ask to have the pages identified, and then we can put in certified copies of them later if it becomes necessary.

The witness continuing: They are pages 206 and 207, in Book One of Canals, records of Maricopa county.

By Judge POPE: And the other page?

A. It is on 304 of Book One and 305 of Canals, the same book.

By Mr. AINSWORTH: If it becomes necessary we will ask to put in certified copies of them.

By the COURT: Very well. They may be considered as
49 offered and admitted in evidence.

That is all.

Witness excused.

Mr. W. H. COAD, a witness duly called and sworn according to law, was examined upon his corporal oath and testified as follows, to wit:

Examination by Judge JOHN D. POPE:

Q. You may state your name.

A. W. H. Coad.

Q. What is your business, and where do you live?

A. I am a civil engineer, and I live at Mesa, in this county.

Q. Who has employed you in that capacity for the last few years?

A. I have been the engineer for the Consolidated Canal Company, plaintiff in this suit.

Q. When did your employment commence with that company?

A. In February, 1892.

Q. And you have been in its employment ever since?

A. Yes, sir.

Q. Have you been engaged in the construction of a canal known as the Consolidated canal?

A. Yes, sir.

Q. Have you a map here of that portion of the canal?
A. Yes, sir.
Q. Is it this one on the board?
A. Yes, sir.
50 Q. Please indicate from which direction the water flows in that canal?
A. The head gates are up in this direction. This shows but a small portion of the canal. It flows down to the division gates (indicating). We have the cross-cut canal here, but the Mesa canal we turn from here, so that at these division gates the canal runs around this way.
Q. At this place the canals are going to the east, west, and south?
A. Yes, sir.
Q. The one going south is the Mesa canal?
A. Yes, sir.
Q. That is the canal of the defendant canal company?
A. Yes, sir.
Q. At what time was the Consolidated canal constructed down to the place called the division gates?
A. It was some time in November, 1891, I believe.
Q. Was it before you came here?
A. Yes, sir.
Q. It had been constructed down that far when you became the engineer of the company?
A. Yes, sir.
Q. What use was being made of the canal when you came here?
A. They were delivering water at this point and carrying water out here—the east branch—and they were delivering the Mesa water to them.
Q. The Mesa water was an older appropriation than the
51 appropriation of Dr. Chandler, was it?
A. Yes, sir.
Q. You know of the agreement by which the Mesa water was to come down through your canal?
A. Yes, sir.
Q. Has it been going that way ever since?
A. Yes, sir.
Q. Is it going that way now?
A. Yes, sir.
Q. Have you any knowledge of the location of that Mesa canal, the old Mesa originally?
A. Yes, sir.
Q. State whether the Consolidated canal is constructed in whole or in part over the same line.
A. A large part of it; yes, sir.
Q. That portion where you have pointed out, the division gates, is that the same place where the old Mesa canal run?
A. Yes, sir.
Q. And going up the canal on that part the line is the same up to the place which you have indicated?

A. Yes, sir; and then it is different for perhaps ¾ of a mile, off in this direction (indicating), where the blue line and the red——

Q. (Interruption.) State whether that old Mesa canal is in use or abandoned at the present time.

A. It is abandoned.

52 Q. From the point above the point where you indicate they come together, it is abandoned and not been in use?

A. No, sir.

Q. Indicate the place called Ayers' head gate.

A. It is near the upper line of the map.

Q. What is the relative elevation of the old Mesa canal at the Ayers head gate and the Consolidated head opposite to it?

A. Right at this point (indicating upon the map), there is five feet difference in the grade of the two canals—that is, the Consolidated canal is five feet higher than the Mesa canal.

Q. Down at the place called the division gates, what is the relative grades of the old Mesa canal and the Consolidated canal?

A. It is five feet still.

Q. You mean by that that the Consolidated canal is five feet above the old Mesa canal?

A. Yes, sir.

Q. From the division head gate down the Mesa canal, state whether the elevation is the same as it was originally when you came there.

A. No, sir. It was raised above this, indicating 75 feet below the division gates.

Q. When you first came there in 1892, what was the relative grade of the Consolidated canal just above the head gate and the Mesa canal below the division gate?

A. There was five feet difference in the grade of the canals.

Q. At what point did the Consolidated canal deliver water to the Mesa canal when you came here?

53 A. At the division gates.

Q. And where has it delivered *it* its water since that time?

A. At the same place.

Q. And the Mesa Canal Company has received it there all of the time?

A. Yes, sir.

Q. Is there a waterfall there?

A. Yes, sir.

Q. How many feet fall is there there?

A. It varies. It is in the neighborhood of a five-foot fall—that is, it is running from three feet to six feet fall, depending upon the amount of water in our canal.

Q. But, as a general proposition, it is in the neighborhood of five feet of fall?

A. Yes, sir—that is, at the division gates—our canal being five feet higher than the Mesa when we drop it down to the Mesa grade.

Q. And it was dropping there in 1892, in February, when you came here—dropping over that fall?

A. Yes.

Q. And it continued to do so until a comparatively recent time?

A. Yes; until some time in March.

Q. State, as an average amount, what is the amount of water the Mesa canal receives at that place from the Consolidated canal.

Defendant objected to that question as not being the best evidence, if it is intended by that to show what the receipts of the Mesa
54 canal are under these rights of the agreement. The agreement shows to the court that it was 7,000 inches at all times under the agreement, and that is the best evidence as to the amount, and that is already in evidence.

By Judge POPE: The agreement is not evidence as to what amount has been flowing over there at all.

Defendant further objects to the question as irrelevant.

Objection overruled by the court and exception taken.

Q. Repeat the question, Mr. Reporter.

Reporter reads the last question: "State, as an average amount, what is the amount of water the Mesa canal receives at that place from the Consolidated canal."

A. The average in the last few years is in the neighborhood of four thousand inches.

Q. When it is up in the river it is more and when it is down it is less?

A. Yes, sir; it depends upon the stage of the water in the river.

Q. Has anybody been exercising the authority of the court or any official authority in apportioning the water in the river?

A. Yes, sir.

Q. And the amount that is run down there and delivered to the Mesa canal—how does that compare with the amount that the officer requires to be delivered to them?

A. It is the amount that he requires to be delivered to them.

Q. Under the old Mesa canal, as it stood before the Consolidated canal was constructed, was there any waterfall there at what is known as the division gates?

55 A. No, sir.

Q. Running down from the upper edge of that map, or from Ayers' head gate in the old Mesa canal, to the place known as the division gate, there was some slight fall in order to make the water flow, but at the division gate there was no drop.

A. No, sir.

Q. How does the Consolidated canal create that fall?

A. By raising the grade and building up the banks of the canal, commencing at the point 5 miles back—above the division gates.

Q. They raised the grade in the construction of the Consolidated canal?

A. Yes, sir. To fill the old Mesa we had to build our banks up so much higher that we could carry five feet more water.

Q. Then when you would reach the point opposite to the Ayers head gate in the construction of the Consolidated canal there would have been a grade or a fall of five feet?

A. Yes, sir.

Q. That is, it was five feet higher than it was in the old Mesa canal?

A. Yes, sir.

Q. And when it was carried down to the division gates it was also five feet higher?

A. Yes, sir.

Q. Then the waterfall was created and caused by the construction of the Consolidated canal on a higher grade?

A. Yes, sir.

56 Q. You are acquainted with the Mesa canal from the division gates down?

A. Yes, sir.

Q. Have you indicated there any lateral ditch below the head gate—the lowest one?

A. Yes; the old Mesa ditch was taken out about 400 feet below.

Q. Was that old ditch there when you came to the Territory in 1892?

A. Yes, sir.

Q. And had been there for some years?

A. Yes.

Q. And that was a lateral ditch taken out towards the east?

A. Yes, sir.

Q. You have stated that in 1892, when you came to the Territory, there was a point some 200 or 300 or 400 feet below the division gate where a lateral ditch commenced, called the Old Lewis ditch?

A. Yes, sir.

Q. (Indicating upon the map.) Is there any other between this point and the division gates?

A. No, sir.

Q. Now, before we come to that, I will ask you, Have you any other map showing the old Mesa canal and the Consolidated canal?

A. Yes. (Witness produces map called for.)

Q. The first map from which this witness has testified we will offer in evidence as Plaintiff's Exhibit No. 1, and this one now offered will be identified as Plaintiff's Exhibit No. 2. Now, have you a map upon which you have indicated the relative water

57 levels of the Consolidated canal and of the Mesa canal at any point?

A. Yes; I have the comparative cross-sections at the Ayers head gate. (Illustrating upon the map:) This is the Mesa canal and this is the cross-section of our canal. They are comparatively the same line there. This red line is the base line, which is taken as a datum line. This has no water in now. I simply indicate the water levels by these blue lines.

Q. Now, you have mentioned or indicated the size and level there in that map?

A. Yes, sir.

Q. How much is the difference—state it again—between the water level in the two canals at this point?

A. The difference in the grades at these two points is five feet.

Ours is five feet higher than the grade in the old Mesa canal at this point (indicating upon the map).

Q. To the left of the cross-section of the Mesa canal you have a comparatively level surface for a distance?

A. That is the way the canal was built. This is the bank of the canal.

Q. What was the bank before the Consolidated canal was constructed?

A. It was a level line. A portion of this was built by the Consolidated Canal Company, when the Consolidated canal was being built.

Q. Is that a part of the dirt excavated?

A. I believe the reason for that was to hold sufficient water
58 in the Mesa canal to float the dredger around the curve, and it necessitated the building of the old banks of the Mesa canal up higher than they were.

Q. That was but a temporary structure for some purpose at that time?

A. Yes, sir.

Q. The old bank is that indicated down on the level more?

A. Yes, sir.

Q. A map made to show the relative height and size of the map down at the division gate—how would it differ from these cross-sections or levels?

A. Not materially. They would be about the same. The grade of the Consolidated canal is five feet higher than that of the old Mesa.

Q. Is there or is there not a fall between the upper part of the Mesa and the Mesa gate?

A. There is a distance of ½ a mile, and the fall is a little over a foot.

Q. Did that exist at that time between those points?

A. Yes, sir.

Q. How much fall is required in flowing water to the mile?

A. It *heeds* two feet to the mile. That is what our canal is run on.

Q. Have you any knowledge with reference to what is called the high-water mark of the old Mesa canal at the Ayers head gate?

A. Yes, sir.

59 Q. How did you become informed on that subject?

A. A committee of the directors of the Mesa Canal Company wished to determine that point, so they got Mr. Dr. Trippel as their engineer to represent the Mesa Canal Company and I represented the Consolidated Canal Company, and we went up to examine the premises, and one of the committee or some of them established a stake at this point, at the Ayers head gate, which they said was the high-water mark at that point.

By Judge STREET: Are you now speaking of what came under your own observation?

A. Yes, sir.

By Mr. POPE: Do you know who did it?

A. Yes; I think it was Warren Serrine. At least he expressed

himself as satisfied with the elevation. I was there when the stake was driven.

Q. Is the stake there now?

A. Yes, sir.

Q. And did they correctly place and put it into the ground?

A. Yes; in my judgment they did; it was correctly placed.

Q. Was there any line defining it?

A. Yes; the line is well defined.

Q. And the stake is there now?

A. Yes, sir.

Q. What is the depth of the Mesa canal at that point, taking that as the high-water mark as they have established it?

A. Four feet.

60 Q. And by filling it up with water to that point the depth would be four feet of water?

A. Yes, sir.

Q. Did you measure it at that time?

Q. Yes, sir; and a cross-section shows that it would be four feet.

Q. Now, state whether the Consolidated Canal Company took any steps to utilize that water power which they had created at the division gates.

A. Yes, sir.

Q. When did they do that?

A. They did it, I think, in January or February of this year.

Q. It was in 1895, wasn't it, Mr. Coad?

A. I think it was in the year 1896.

Q. That would be the present year?

A. Yes; I think it was in December, 1895, or in January, 1896.

Q. Where were you at the time the water wheel was put into position there?

A. I was at the headquarters of the company.

Q. Do you know whether that was put in in 1895 or in 1896?

A. If it was put in in 1895, it was put in very late in the year. I am not sure about that point.

Q. What was put in there?

A. We put in a water wheel, a kind of an overflow wheel, and machinery—that is, some wheels to operate some machinery.

Q. Have you any map by which you can show the kind of machinery put in there?

61 A. Yes; this map shows the relative position of the wheels. It is map No. 3, plaintiff's exhibit.

Q. Before you indicated the machinery upon that, what map was that?

A. It was a plan of the division gates. This shows the drop and this line here represents the grade of the Consolidated canal, and this lower line five feet below is the grade of the Mesa canal.

Q. How did you put in the wheel?

A. The wheel was simply an over-flow wheel, or rather an undershot wheel would be the proper definition, and the water coming out through here and flowing down drove the wheel.

Q. And then you carry that to another wheel, do you?

A. Yes; and transmitted it to a counter-shaft, and on that was a large pulley and from there we transmitted it to an electric attachment to use the barley-crusher.

Q. What was the amount of water power at that point, or the possible water power at that point?

A. An average amount of 4,000 inches would be in the neighborhood of 40 horse-power.

Q. That is, 100 inches would make one horse-power?

A. Yes.

Q. And that is about an average fall of five feet?

A. Yes, sir.

Q. Is that mill used for any purpose there?

A. Yes; we use it for grinding barley.

Q. Was anything done to interfere with the operation of
62 that machinery?

A. Yes; they put in a dam below and shut us off.

Q. Who did that?

A. The Mesa Canal Company, or the directors of it.

Q. Can you show the effect of that upon the map?

A. Yes; this blue line was the water mark at the time we put the wheel in, and this upper blue mark that they have held it at.

Q. Now you say that something was done to interfere with the operation of the machinery?

A. Yes; they put in a check there.

Q. How did that interfere with the operation of your machinery? What works did they put in there?

A. They put in a brush and a rock dam right in here (indicating on the map), in the neighborhood of 75 feet below the division gate.

Q. They first put in a rock and a brush dam about there?

A. Yes, sir; and that raised the water in the Mesa canal several feet.

Q. How many feet did it raise it?

A. Several feet.

Q. And afterwards—have they done anything to raise it still higher?

A. Yes; they tore out that rock and brush dam and put in a new timber dam about 120 feet below the division gates and that holds it up still higher.

Q. How much have they raised the water in the Mesa canal at that point altogether?

63 A. Something over three feet.

Q. What effect does that have upon the water power of the Consolidated canal?

A. It destroys it entirely.

Q. Did it make it impossible to operate that machinery that you had in there?

A. Yes, sir.

Q. Can any other machinery be operated there?

A. No, sir; there wouldn't be sufficient fall to justify putting any kind of machinery in there with just a foot fall.

By the COURT: Explain again why it stopped the machinery?

A. It backed the water up on the wheel and the fall was taken away so that the machinery couldn't run. There was nothing to propell it.

By Judge POPE: When did they put in that lumber dam that you have spoken of?

A. It is not over five or six weeks ago.

Q. That was after this suit was begun?

A. Yes, sir.

Q. At the time this suit was begun they had a rock and a brush dam in there which wasn't so high as the present dam?

A. Yes, sir.

Q. Is the lumber dam so constructed as to raise the water still higher in the Mesa canal?

A. Yes, sir. With a gate there they can raise the water up several feet higher by means of drop-boards.

64 Q. Since the old dam was put in there, has there been any possibility of using the water power?

A. No, sir.

Q. By the COURT: The effect of their putting the first dam in there was to stop the running of the machinery?

A. Yes, sir.

By Judge POPE: Had the defendants constructed a new lateral ditch there?

A. Yes; the new Mesa ditch.

Q. Was that constructed after your water power was developed in the Consolidated canal at that point that they did that?

A. Yes, sir.

Q. And that east Mesa ditch, is that higher or is it on a level with the old Mesa canal?

A. It is much higher; it is raised up to match the grade of the Consolidated canal.

Q. That is above the division gate?

A. Yes; you have to have water above here (indicating upon the map), above our grade, in order to get the water out there.

Q. And to get water in there to fill up the Mesa ditch it is necessary to destroy your waterfall?

A. Yes, sir.

Q. And they have done that since the water power was created by the Consolidated Canal Company and they have backed the water up and destroyed the power?

A. Yes, sir.

65 Q. Since you came into the service of the Consolidated Canal Company in February, 1892, and before they had made those two raises there in the water level of the Mesa canal, had they done anything to destroy the fall of the water below the head gates?

A. They had their old ditch right at this point (indicating)—at the point where the old Lewis ditch is taken out, some 400 feet below the division gates—and they put in a brush or a rock dam to enable them to get their water out at the elevation of the old Lewis ditch.

Q. How much did they raise it then? Was that small or large?
A. It was smaller than the other one, but I don't know how much.
Q. And that took place before the building of those dams that you spoke of a while ago?
A. Yes, sir.
Q. Then they commenced with a small one at the Lewis ditch, and after that they put in a rock and brush dam about 75 feet below the division gate, and then after that, and since the filing of this suit, they put in a wider dam, which is higher than all and with arrangements for elevating it still higher?
A. Yes, sir.

By the COURT:

Q. The first obstruction in the Lewis ditch, did that interfere with the flow or fall of the water?
A. Yes; that would take it off to some extent.
Q. To what extent?
A. I have never made an observation from my own instrument; but I would say that it was in the neighborhood of one foot
66 or a foot and a half—that is, in backing the water up that much higher.
Q. That was in order to get an additional head out of there?
A. Yes; and then afterwards they put in a dam higher.
By Judge POPE: I will ask you about another effect of backing up the water in that canal—that is, what effect will it have? You have spoken of the effect upon the water power. Now, what effect does it have upon the flow of the water in the Consolidated canal?
A. It checks the velocity of the water and decreases the capacity of the canal.
Q. That is, when the water varies in the canal, according to the stages of the water in the river?
A. Yes, sir.
Q. How much water is that intended to carry at the fullest capacity?
A. 25,000 inches of water.
Q. And the object is to make use of the water when the river is high, for irrigation purposes?
A. Yes, sir.
Q. And it was built for the purpose of carrying 25,000 inches of water?
A. Yes, sir.
Q. We will suppose that dam that the defendants put in there below the head gate, and the water was at the stage when there would be 25,000 inches of water in the canal, what would be the effect of that dam upon our canal?
67 A. That dam would raise the water above our grade, and we wouldn't be able to run the same amount of water in our canal.
Q. And if the water wasn't quite so high and you had 20,000

inches of water in the canal, how would it operate upon the capacity of the canal?

A. It would decrease it so long as they had the water backed high enough to raise it above our grade. It would diminish the flow.

Q. Can they get it into their ditch without going above your grade?

A. No, sir.

Q. How much have they got above your grade at this stage?

A. 1.85 feet.

Q. And it obstructs the flow of your water in the head gate and that diminishes the capacity of the canal, and it varies according to the height of the water?

A. Yes, sir.

Q. What effect does it have in regard to filling up the canal by depositing silt in the canal as constructed now?

A. The canal is constructed now so as to clean itself substantially and we cannot afford to take any of the grade off.

Q. What would be the effect if you did?

A. The silt would be deposited more than now, and that fills it up and makes it necessary to clean it out more frequently.

Q. Would there be an increasing of the danger of breaking the banks of the canal?

A. Yes; that would be very serious. We have to climb onto the side of the hill here for about two miles along the Mesa, and
68 we would crowd that and we don't dare to have any grade taken off, for we would have to raise it on the banks, and I believe it is hard to construct it, and it would be dangerous to have to take off any grade, and it would diminish our capacity, and we need the water. We might have a break in our banks by trying to run it.

Q. When this obstruction occurs where they have got it now, their check, state whether it operates in its present condition to impede the flow of the water in the canal above the point known as the Ayers head gate.

A. Yes, sir.

Q. The fall is something like 2 feet to the mile, you say?

A. Yes, sir.

Q. And if it was reduced to one foot per mile it would be too little?

A. Yes, sir; it needs two feet to the mile.

Q. And that is what it is with that obstruction out?

A. Yes, sir.

Q How far back does that obstruction effect the canal?

A. You might say that it effects it for several miles. If it effects it in one place, it takes off a certain grade all the way through.

Q. In raising it up a foot it would take off the fall for a half a mile?

A. Yes, sir.

Q. And backing it up 1.85 feet would take it nearly one mile?

A. Yes, sir.

69 Q. And that would effect the grade and the capacity of the canal all the way through?

A. Yes, sir.

That is all.

Cross-examination.

By Judge STREET:

Q. You went into the employ of the Consolidated Canal Company in the year 1892?

A. Yes, sir.

By the COURT: I don't understand the theory about why the canal would be effected by this check at this point up in the foothills. I gather from what has been said that it would reduce the capacity of the canal, and there would be less fall and a less amount of water in the canal, and the silt would be deposited the more liberally. Now, why does that tend to do this?

A. We would also have to raise it higher along the banks, and every inch we raise it is dangerous to our banks. Our experience shows that it has produced that effect.

By Judge STREET:

Q. The Consolidated canal had been constructed down to the division gates when you went to work for the company?

A. Yes, sir.

Q. And the division gates were in?

A. Yes, sir.

Q. You had nothing to do with the making of the grade in the new Consolidated canal?

70 A. No, sir; not to that point; I wasn't the engineer of the company at that time.

Q. Nor over any point between that and the river?

A. Not at the time I went into the employ of the company, but after that we did other work which strengthened the banks.

Q. Now, on the lower map, Defendant's Exhibit No. 1, the point that is marked division gates here (indicating upon the map) corresponds with the same literal drawing of the division gates on plaintiff's map No. 1?

A. Yes, sir.

Q. And the lines extended northerly through section 11 and section 1, etc., to the northeast is the line of the Consolidated canal to a point on the Salt river?

A. Yes, sir.

Q. And represents for the same distance that which is represented on plaintiff's map as the Consolidated canal running north?

A. Yes, sir.

Q. You say that at the division gate the grade or bottom of the canal has been raised five feet?

A. Yes, sir,

Q. That is five feet above what point?

A. Above the grade of the original Mesa canal.

Q. Do you know where the grade of the Mesa canal formerly was?

A. No, sir.

Q. Then from what data do you say it was five feet above the grade of the old Mesa canal?

A. From the plans in the office and from observation since

71 Q. Then you got it from other work?

A. No; not entirely.

Q. You knew nothing of it until after it was constructed into the consolidated canal and up to the river?

A. No, sir.

Q. Then why, from any observation that you have made of the old canal, is it that you can give any testimony as to the grade of the old canal?

A. From the levels.

Q. From what?

A. From the levels that I took of the canal.

Q. The old canal was obliterated, wasn't it?

A. Yes; but the bottom was there.

Q. How do you know that the bottom remained the same?

A. We have evidences of it today.

Q. Do you know whether it is a fact that the grade was taken out of the old canal at many points between the river and the division gates and changed?

A. Yes; I know that it was changed in several places—that is, outline of the canal was changed.

Q. How do you know that?

A. Anybody can see it from the old marks.

By the COURT: Then the present consolidated canal from the head gate northeast doesn't follow the exact bed or grade of the old Mesa canal in all places?

A. No, sir.

72 Q. Then do I understand you to say that the old grade of the Mesa canal is left exposed?

A. Yes, sir; for long distances.

By Judge STREET:

Q. On defendant's map will you please designate where the line of the Consolidated canal is different from the old Mesa canal.

A. The map is wrong there; it should be over in here (indicating upon the map). I cannot show it on this map. There is a distance there for $\frac{1}{2}$ or $\frac{3}{4}$ of a mile, and they made a deep cut in here and joined onto that point.

Q. For what distance is that?

A. I think it is in the neighborhood of $\frac{1}{2}$ or $\frac{3}{4}$ of a mile.

Q. You have never measured the distance, have you?

A. No, sir.

Q. From the point there again northerly where has it departed from the old line?

A. I think we followed up close to the side cuts until we got up

in this vicinity of section 31, but that is pretty hard, to state that exactly.

Q. Then how much departure is there for that distance?

A. I have never measured it.

Q. Is it ¼ of a mile or a ½ mile?

A. Yes; it is over ½ a mile.

Q. And those two points are the only important points, are they?

A. Well, at the head (indicating). At the Ayers gates there was a little chunk in there where we didn't follow it.

73 Q. Can you tell what the difference in elevation is between the division gate and the head of the canal?

A. Yes, sir.

Q. What is it?

A. It is 2 feet to the mile to this point (indicating).

Q. From the division gate to the old head gate at that point on section 29?

A. The distance is 5¼ miles, and that would make it 10½ feet fall, and then from here on up is the new grades that we have constructed, and that has a grade of 3 feet to the mile.

Q. Do you know the difference between the grade of the division gate and the old head of the Mesa canal?

A. I couldn't say exactly.

Q. You don't know, then, as a matter of fact, the five feet that you have here raised from the bottom of the old Mesa canal has been made as a complete elevation above the head of the old Mesa canal by simply changing the grade along the line of the canal or by sinking the level of the head on the river—that is, you don't know how this elevation has been obtained, do you?

A. Yes, sir.

Q. Tell us about it.

A. This has been obtained here. This old Mesa has a 12-foot ditch running along the foot-hills down to the point, and it had a variable grade of from 2 feet to the mile to 10 or 15 feet to the mile, I am told; but, at any rate, from the levels I have made I have found that the Mesa grade at 3 feet to the mile—or, at least,

74 sufficient extra grade to enable us to go in at a lateral grade and save that much fall, and to gain the elevation of five feet.

Q. Then this elevation that you have made is not actually made by the Consolidated Canal Company, or created by that company, as you have said?

A. Yes, sir.

Q. How?

A. By raising the banks.

Q. By raising the banks only?

A. Well, if you raise the banks, that will create the grade.

Q. Isn't that the only way in which you have made it?

A. We enlarged the banks and made thorough cuts.

Q. Then you don't mean to say that this has been done by raising the bottom of the canal?

A. Yes, sir.

Q. Then the bottom has been raised, has it?

A. Yes; the grade is lifted five feet.

Q. And that is made visible by building the banks around the side and by enlarging it?

A. Yes, sir.

Q. How high do you say that the water has been raised by the check that was put in the Mesa canal?

A. One foot and $\frac{85}{100}$ below the division gate.

Q. And you say that there is five feet difference between the floor of yours and the floor of theirs?

A. Yes, sir.

75 Q. Then, how many feet have the Mesa people raised theirs?

A. Do you mean as to the grade of the bottom of the ditch or of the surface of the water?

Q. I means the surface of the water.

A. They have raised the surface of the water in the neighborhood of four feet—or 3¾ feet, I could safely say.

Q. And that would be beneath the floor of the Consolidated canal?

A. No, sir.

Q. Isn't there five feet of fall?

A. Yes; but they had still some water in there. The surface of their water would be two feet below the surface of our gate.

Q. Then you are assuming the amount of water that they have in the canal?

A. Yes, sir.

Q. You are not speaking of the ground floor of the Mesa canal and the ground floor of the Consolidated canal?

A. No more than I have said that they differ five feet in elevation.

Q. When the water is running over the banks and they put in their check, how close up to the floor of the Mesa canal does the level of the water come?

A. The last check do you have reference to?

Q. Either one of them.

A. The last one raised it—do you mean higher?

Q. I mean the normal flow of the water.

A. Well, you would have to tell me how much water they had.

76 Q. Well, let us assume that there is 7,000 inches of water.

A. Then they would have 1.85 feet.

Q. How far would that be below the floor of the Consolidated?

A. That is above the Consolidated canal. It stands above our grade.

Q. Then there is a fall of five feet from the floor of your canal to the floor of theirs?

A. Yes, sir.

Q. When the 7,000 inches is running through there and they had no check in the Mesa canal, where does the surface of the water—the technical surface of the water of the Mesa canal—come, with reference to the floor of the Consolidated canal?

A. Before they put in any checks it was at 1¼ feet below the floor of our gates. One and a quarter feet—that is, not saying anything about this check here (indicating), but these two raises were subsequent to that.

Q. Then you have made only 1¼ feet of a fall?

A. No, sir, because we have a certain amount of water in our canal.

Q. Suppose you are running in your canal no more than the 7,000 inches which you have to deliver to them?

A. Then we would get our fall.

Q. Then you will have made your fall of 1¼ feet?

A. No, sir; we get the fall from the surface of ours to the floor of theirs.

Q. How much is that?

A. That would make it over four feet.

77 Q. Do you know the difference in the grade between the division gate and the old Ayers head gate?

A. Yes, sir.

Q. Between this (pointing to the map)?

A. Ours is a trifle over a foot. It is on a grade of 2 feet to the mile, and it is a little over a half mile to this point.

Q. When did you measure that?

A. I made this some little time ago. I think it was made 8 or 9 months ago.

Q. Are you confident that it is more than 6 inches?

A. Yes, sir.

Q. Is there a difference in the elevation between the division gate and the Ayers head gate in your ditch?

A. There is a difference. This may be dug a little below the grade here. We came along with the dredger, and it is hard to get at the grade; but the true grade between those would be simply the distance. If it is a half a mile there would be one foot difference.

Q. I am asking you what it is and how you know?

A. I don't know to the fraction of an inch.

Q. You don't know whether it is over 6 inches or not?

A. Yes; but I don't know the exact amount.

Q. What is the difference of the grade between the division gate and the old Ayers head gate in the Mesa canal?

A. There is a little over 11 inches difference in the grade. The grade of the old Mesa at this point, known as the Ayers

78 ditch, is 11 inches higher than the grade of the old Mesa at this point (indicating) below the division gate.

Q. Then it is a fact that all of the grade or elevation that has been made by the Consolidated Canal Company is between the point of the old Ayers head gate and the river?

A. Well, it would be the same grade at that point as it is down at this point (indicating).

Q. Then you have made nothing from this point down to this?

A. No, sir; positively nothing.

Q. What sort of a mill is it that was put in below these division gates?

A. It is an undershot wheel.

Q. How large is it?

A. It is four or five feet in diameter, consisting of a wheel and several large belts. It is what is known and called an undershot wheel.

Q. And that is in the Mesa canal?

A. That was under the division gate.

Q. But on the Mesa canal, wasn't it?

A. It was under our division gate.

Q. Well, it was from the Mesa canal?

A. Yes, sir.

Q. This canal that runs along here is the Consolidated canal?

A. Yes, sir.

Q. The Mesa Canal Company never claimed any interest in either one of these lateral branches?

79 A. No, sir.

Q. And you know of no interest that they claim whatever from the contract interest between the division gate and the river?

A. I know in one sense, but perhaps I don't know in the sense that you mean. Do you call this an interest in obtaining the elevation?

Q. I mean any rights that they have except that.

A. No, sir; I don't.

Q. Below the division gates is the Mesa canal?

A. Yes, sir.

Q. Did Mr. Chandler or the Consolidated Canal Company have any interest or claim any in the Mesa canal, excepting that which they may have by virtue of the Mesa canal interest?

A. I don't know as I understand you.

Q. The proposition of the Consolidated canal ended with the division gates?

A. Yes, sir.

Q. How far below this division gate was this wheel put in?

A. It wasn't below it at all.

Q. Was it above it?

No answer.

(Interruption by the COURT:) Do you mean to embrace that in your question—about the interest below that point? State that again.

By Judge STREET: I wish to include with other property interests owned—we have related here (at this point the counsel surrounded the map with the witnesses, and all talking at once so in-

80 distinctly that the reporter was unable to reproduce it); but we admit their east branch and the cross-cut and the dam, but below this gate none.

Q. Where 'bouts with reference to the division gate was this wheel put in?

A. It was right at this point.

Q. And below that is the apron for the water to run on?

A. Yes; they had to build that up in the first place to have a bridge.

Q. Has there been an apron built there?

A. Yes; there is a space of 18 feet left in there for a bridge and driveway.

Q. Is there a floor put below that (indicating upon the map)?

A. We have put a floor here, a big heavy floor, the same as we put in our own gates.

Q. After the water has passed through the division gate you have nothing further to do with the water, have you?

A. No, sir.

Q. It drops down here and the Consolidated Canal Company exercise no further control over the water?

A. No, sir.

Q. And this wheel is put below the division gate?

A. Yes, sir.

Q. So that all of the water that goes through the division gate—it is the intention to have all of the water that goes through there to strike onto the wheel?

81 A. Yes, sir.

By the COURT:

Q. That water that strikes the wheel is the water that belongs to the Mesa Canal Company?

A. Yes, sir.

By Judge STREET:

Q. There is also a division gate here to let the water run into the east branch and here (indicating) to the west branch?

A. Yes, sir.

Q. When the water runs into the east branch the Mesa canal exercises no control over it?

A. No, sir.

Q. Nor in the west branch?

A. No.

Q. But when the water is run into the Mesa canal through this gate immediatly, then they have the exercise of the water in their canal?

A. Yes, sir.

Q. What horse-power is that machine that you put in there?

A. That is pretty hard to say; it don't have very much.

Q. Did it have any particular horse-power?

A. It had perhaps three or four horse-power.

Q. How close up to the division gate was the water wheel?

A. Do you mean how close to the bottom of the Mesa gate?

Q. Suppose this was the division gate that raises and lowers (illustrating) to let the water through. How far this way was the wheel?

82 A. It set out 2½ feet, perhaps, away from the gates.

Q. Two feet and a half?

A. Yes, sir; I can show you exactly how on the map—the pulleys reach out here.

Q. How was that wheel geered to other wheels?

A. By means of pulleys.
Q. How far away was they?
A. The first pulley was some 12 or 15 feet.
Q. Down from the Mesa canal?
A. Yes.
Q. Then what other machinery besides that did you have?
A. There was a platform built there—a 16-foot platform.
Q. How far below these gates was it?
A. That may be perhaps 25 or 30 feet to the end of it.
Q. And the machinery run down to the end of it?
A. Yes.
Q. Then from the division gate to the end of the machinery was a distance of from 25 to 30 feet?
A. Yes, sir.
Q. And that side of the wheel she was geered on to the pulley which was geered onto the barley-crusher?
A. Yes, sir.
Q. Can you describe to us the capacity of that barley-crusher?
A. It had a capacity ranging from 100 to 150 sacks in ten hours.
Q. That is run by what power?
A. The water from the division gate.
83 Q. How many horse-power would it take to crush 150 sacks per day?
A. I don't know; not very much.
Q. Would there be the normal capacity of 3-horse power?
A. I don't know.
Q. Did you help to put that machinery in there?
A. Yes, sir.
Q. Was it done in the daytime or in the night-time?
A. The wheel was put in there in the night-time.
Q. Why?
A. We didn't have very much notice, and we wished to get it in as soon as possible.
Q. You didn't have very much notice of what?
A. Well, we understood that we were to be interfered with—that our power was to be interfered with.
Q. That is, you understood that there was opposition from the Mesa Canal Company?
A. Yes, sir.
Q. And so you wanted to put it in in the night-time to avoid it?
A. Yes, sir.
Q. Were you asked afterwards by the Mesa people to take it out?
A. They may have asked us; I don't know.
Q. What is the difference in the elevation between the Mesa canal and the east and the west laterals?
A. There is five feet difference between the Mesa and the east branch and three feet difference between the Mesa and the west branch. They have a drop of 2 feet there from our division
84 gates into that canal.
Q. Did you say that at the time this machinery was put in

there the old Mesa people had then a check out of the old Lewis ditch?

A. We have always maintained that we had one there since we put in our gates.

Q. It was there, then, before you put in this machinery?

A. Yes; at this point (indicating upon the map).

Q. How far up did that back the water—how high did that raise the water at the gate?

A. Well, 15 inches below the surface of our gate when they were running a good head.

Q. Then it did raise it at the gate on the surface?

A. Yes; it checked it back a little.

Q. Do you know what this old Lewis ditch was used for?

A. Yes, sir.

Q. Describe that upon the defendant's exhibit. State what the old ditch was used for.

A. It was used to irrigate the lands under it in this vicinity.

Q. Mention the sections.

A. I don't know them; I am not familiar with them.

Q. What lands do the new Mesa ditch irrigate, do you know?

A. I presume the new Mesa irrigates a large portion of these lands that was irrigated and some new lands.

Q. Do you know anything about the effectiveness of the irrigation from the old Lewis ditch?

A. No, sir; I have not had any experience under that ditch.

85 Q. You haven't run any grade on that ditch then?

A. Yes; but not clear through, but I have taken the grade on different points.

Q. You don't know whether that is a sluggish ditch or not?

A. Yes; it was. It is of uneven grade.

Q. But it was rapid at the head of it?

A. Yes, sir.

Q. And sluggish from there down?

A. I couldn't say for certain, but I understand so.

Q. Do you know anything about the grade of the Lewis ditch?

A. It is 2 feet to the mile.

Q. Is that a fair grade?

A. It is a fair grade for a large ditch, but not for a small one.

Q. It is as good as the company could afford without a great deal of expense?

A. Yes, sir.

Q. And it is a good uniform ditch?

A. Yes, sir.

Q. And it is a well-constructed ditch?

A. Yes, sir.

Q. But the old Lewis ditch was a kind of a framer's make-shift?

A. Yes; I presume that it needed grading out, from what I have heard of it.

Q. Has the Consolidated Canal Company irrigated any lands from the corss cut, say sections number 14 and 15?

A. Not from the Consolidated; still these people did irri-
86 gate a very little down in this vicinity of section 15 and run it down this lateral.

Q. Now, the check that has been put in at the new Lewis ditch was formerly a make-shift check, of stones and brush, etc. ?

A. Yes, sir.

Q. A temporary check?

A. Yes, sir.

Q. What was that for?

A. To hold it high enough to get it into the new Lewis ditch.

Q. And they have since then built a permanent structure?

A. Yes, sir.

Q. And that is for what purpose?

A. To hold the water still high enough.

Q. And for the purpose of putting it into this new ditch?

A. Yes, sir.

Q. Do you know anything at all about a check that is in the Consolidated canal up somewhere near the old Ayers head gate?

A. No, sir; we have no check there now, but there was a check there.

Q. When was that in there; when was it put there and when was it taken out?

A. I don't know when it was put there, but it was taken out some two or three months ago.

Q. Why was it taken out?

A. Because it was an obstruction there.

Q. What was it put in there for?

87 A. To irrigate some land.

Q. What land?

A. Land lying in this vicinity—on section No. 10 or 11.

Q. And that necessarily backed the water back from the Ayers head gate some distance along the foot-hills that you speak of?

A. Yes, sir.

Q. How much of a check did you put in there?

A. I didn't put it in and I don't remember how much of a check it was, but it held the water up nearly two feet.

Q. How far did it back it up?

A. It was over a mile along the line of this side gate, along the foot-hills.

Q. Is it a fact that at any time a check down here (indicating) to the extent which has now been built by the Mesa canal people, could raise the water back here, 2 miles there, above the head gate, as high as this check which the Consolidated Canal Company put in near the Ayers head gate did raise it?

A. No, sir; I think not.

Q. Then, whatever danger there was of overflowing the bank from the very heavy head, the risk of that was run by the Consolidated Canal Company in putting in this check?

A. Yes, sir.

Q. Under how heavy a head was that check put in?

A. It was 8,000 or 10,000 inches, perhaps, or more.

Q. Assuming that the Mesa canal people were entitled to 9,000 inches of water running through their division gate and
88 they were receiving it at their Mesa canal, and that there was 9,000 inches of water in the Consolidated canal, going down, what effect would this new check have upon the Consolidated portion of the canal?

A. That depends upon how much water they were taking out; so far as any danger from breaks is concerned, it wouldn't amount to anything.

Q. Let us find out the capacity of the new Lewis branch.

A. That I would say is between 1,500 and 2,000 inches.

Q. Have you ever measured that to see?

A. Yes; but I have forgotten the figures. I wouldn't want to give it any closer than that.

Q. You don't know what land it irrigates?

A. Nothing, except that it irrigates some of the old and some of the new that wasn't irrigated before.

Q. Well, when 9,000 inches of water are going through the gate you think they would take about ⅔ths of the water that would be going through?

A. Well, that would depend upon how high they wanted to raise the water.

Q. Well, say that 20,000 inches of water is going down, and that 9,000 inches is going into the Mesa canal and the rest is running into the other one or both of the laterals, and the check was in there sufficient to put in 2,000 inches into the new east canal, what effect would that have on the Consolidated portion?

A. You would have to have the surface of that water 2¼ feet approximately above the floor of our gates, and that is the
89 same as if you put a 2½-feet check across our canal here (indicating upon the map).

Q. Suppose it was running into the east and the west branches at the same time, were they sufficiently large to run it—would it have an appreciable effect upon them?

A. It cuts no figure on the capacity by putting a check into the canal.

Q. Assuming that there is 7,000 inches of water running down the Mesa canal, wouldn't it?

A. It makes no difference.

Q. With a floor that is five feet difference?

A. The surface of the water is what you would have to go by, and that is two feet above the floor of our gates. It would affect the grade of the canal.

Q. As a matter of fact, it is necessary to check the water if the Consolidated Canal Company, by the Mesa division gate, want to throw it either into the east or into the west branch?

A. Well, that is depending upon the certain seasons.

Q. At certain seasons isn't it a fact that it will itself fill the division gates away up to here (indicating); that the water would run into the Mesa instead of into the other branches?

A. If we open the east and the west branch gates, both, the Mesa canal would get but a very small portion of it.

Q. The most of it would go into the east and the west branch-?

A. The greater portion of it would go into the west branch.

Q. There is no drop into the east branch, is there?

90 A. No, sir.

Q. Then the water would naturally divide itself between the west branch and the Mesa canal, would it?

A. I don't know, but that would be the theory.

Q. If there is a fall in the east branch, why do you not put the machinery in the west branch on that Consolidated property instead of on the Mesa canal?

A. Because we don't have any water falling into the west branch of the canal.

Q. Then it is your purpose to use the Mesa water?

A. Yes, sir.

Q. But the Mesa water, having always a guarantee to the first right to the extent of 7,000 inches?

A. Yes, sir.

Q. Up to the amount of this contract?

A. Yes, sir.

Q. At the time you were irrigating sections 10 and 11, is it not a fact that you shut down all of the gates at the east and the west and the Mesa canal and backed the water up?

A. Yes; I believe so, in order to irrigate this plnce in here (indicating upon the map).

Q. How far is that below the Ayres head gate?

A. About ¼ of a mile.

Q. Then that is about half way between the Ayres head gate and the division gate?

A. Yes, sir.

91 Q. Is that the only time you have had those division gates shut down?

A. No, sir; I believe there was some other times, but I am not familiar with them. It has not been many times, though.

Q. You are not familiar enough with that subject yourself?

A. No, sir.

Q. How much higher did that raise the water at the point where you were taking it out than the check of the defendant's would raise the water at the same point? The check you say here would raise the water in the Consolidated?

A. Yes; I get the point you mean. It would raise it higher than this check has raised the water so far.

Q. But the measure of it you haven't got?

A. No, sir.

That is all.

Redirect examination.

By Judge POPE:

Q. Was it day or night time when the Mesa people put that rock and brush dam and check below the division gate?

A. It was night-time when they put that in there.

Q. And you have stated that you put the Consolidated wheel in at night. Did I understand you correctly?

A. Yes, sir.

Q. How long had you been considering it before you got it ready to put in?

A. The day before we built it.

Q. After it was put in what did you do?

92 A. We put the rest of it in in the daytime—the platform and the pulleys and things like that.

Q. Did you have to shut the water out to put it in?

A. I think the water was out. I cannot state that fact deffinitely.

Q. Explain to the court your plan of the division gate or any other structures there—explain it fully. Take the defendant's map No. 3. You say that exhibits the structure of the division gates?

A. Yes, sir.

Q. What is the width of your structure up and down the stream?

A. It is about 24 feet wide and it is about the same distance up and down the stream.

Q. And it consists of a large framework some 24 or 25 feet square?

A. Yes, sir; and it runs in three directions.

Q. And reaching across the canal?

A. Yes; from the east to the west.

Q. Then there were three gates there in all, allowing the water to flow into the east branch, and one into the west branch, and one to let it into the Mesa canal?

A. We have three sides to it, but of the gates, there are 12 or 15 gates altogether.

Q. A while ago, in answering the questions of Judge Street, you were talking about where the gates were—you mean by that the upright boards instead of the framework—that cut off the water; but that is not the whole structure?

A. No, sir.

93 Q. The whole structure extends how many feet below what you call the gate that lets the water into the Mesa canal?

A. In the neighborhood of 18 feet.

Q. The framework extends down that far?

A. Yes, sir; below the gates.

Q. At the bottom of that, what do you have?

A. A floor.

Q. Above it, what do you have?

A. A floor.

Q. Then the fall of the water is 18 feet from the lower edge of the structure?

A. Yes, sir.

Q. How far is it from the upper edge of the structure?

A. It is 24 feet.

Q. Then the 24 feet and the 18 feet makes it over 40 feet up and down the canal; and the dimensions of the gates are 18 feet above the lower part of the structure?

A. Yes, sir.

Q. What is the object of the floor below?

A. To keep it from washing.

Q. Then it is necessary to have that extend below the gates?

A. Yes, sir.

Q. Was that wheel put inside or down below?

A. It is inside.

Q. How many feet is it inside from the lower edge?

A. It is about between 13 and 14 feet.

94 Q. That is, from the place where you deliver the water and the bottom of the structure before it runs off into the Mesa canal?

A. Yes, sir.

Q. That is true, is it?

A. Yes, sir.

Q. Where was the mill put, on the frame or out on the ground?

A. It is on the platform and bridge across the canal.

Q. And that is a part of the structure?

A. Yes; a part of the bridge is left there.

Q. Whose ranch is that head gate on?

A. I believe it is on Dr. Chandler's ranch.

Q. The old Ayers ditch runs off in a southwesterly direction from the Ayers head gate, does it?

A. Yes, sir.

Q. Are you able to state what lands that was intended to irrigate?

A. That was supposed to irrigate a part of section 15.

Q. Now, do you know whether that ditch had any appreciable fall or not?

A. I know that it didn't have any appreciable fall.

Q. The water wouldn't run and they closed the ditch up?

A. Yes, sir.

Q. How does the Ayers land compare with the grade of the Consolidated canal at the head gate?

A. The Ayres land, at this point: At the northeast corner of section 15, town one north, and range 5 east, the point established by the committee of the Mesa directors and the floor of the di-

95 vision gate is about level. It is so nearly level that I have forgotten the exact distance and difference between them.

That is all.

Recross-examination.

By Judge STREET:

Q. This portion of that gate structure below the gates subserves what purpose?

A. It is as a bridge above and to hold the gates in.

Q. It is simply to strengthen the structure, then?
A. Yes; and to keep the gates from washing.
Q. And this is only to protect the framework above from the water running through the gates?
A. Yes; that is the main idea and object.
Q. The Consolidated Canal Company has nothing to do with that water while it is running over the floor, has it?
A. I don't know whether it has or not.
Q. Do you know whether any land is irrigated now by the Ayers ditch or not?
A. I think not.
Q. Was there any irrigated by it at any time?
A. I wasn't here at that time, and I only know from hearsay.

That is all.
By Judge POPE: That is all.
Witness excused.

By the COURT: The time for closing has about arrived, and I will adjourn till tomorrow morning at 9 o'clock.

96 The court thereupon adjourned.

SATURDAY A. M. SESSION, *Dec. 12th*, 1896.

The court being opened, parties to this cause present and represented by their respective counsel, the court remarked: You may go along with this case on trial.

W. A. MCGINNIS, Esqr., a witness called, duly sworn according to law, and examined on behalf of the plaintiff, testified as follows, to wit:

Examination by Judge POPE:

Q. You may state your full name, residence, and occupation.
A. My name is W. A. McGinnus; I am a resident of Phœnix, and am a civil engineer and architect by profession.
Q. How long have you been a civil engineer?
A. From 15 to 18 years.
Q. Did you have any employment with the company in the construction of the Consolidated canal?
A. Yes, sir.
Q. What time did your employment commence?
A. I think it was some time in 1890.
Q. Did you lay out the canal down to the division gates?
A. Yes, sir.
Q. And was it constructed under your supervision?
A. Down to the head gates it was.
Q. Did you plan the division gates?
A. Yes.
97 Q. What grade did you take for the Consolidated canal with respect to the grade of the old Mesa canal?
A. I never did know what grade the old Mesa canal had, but I

run the Consolidated canal grade—it has been some time since I did that work and I have turned my field-notes over to Dr. Chandler, and I cannot remember.

Q. I am not asking what it was by the foot or the inch, but with respect to the grade of the Mesa canal. Was it the same or was it more?

A. It was less fall per mile; the distance was 7½ miles, and there was a difference of about 5 feet down at the head gate.

Q. What was the effect of having the fall less in the Consolidated canal than it was in the Mesa, towards the lower end of the canal?

A. It was that much higher at the lower end.

Q. How much higher was the Consolidated canal than the Mesa at that point?

A. I don't know.

Q. Can you approximate it?

A. The distance from the division gates to where the so-called Ayers head gate was located is somewhere about ½ mile, and the grade is about two feet to the mile.

Q. Compare the level of the water at the Ayers head gate with the water level in the Consolidated canal at that point or opposite that point, and can you tell how much the difference of the levels were in the two?

A. No, sir.

98 Q. What was the difference in the levels between them at the division gates?

A. It was four feet and eleven inches.

Q. Which was the higher at that division gate?

A. The Consolidated canal was the higher by 4 feet and 11 inches.

Q. That is the point where the water is transferred into the Mesa canal by the Consolidated canal?

A. Yes, sir.

Q. When did they commence transferring it in there at that point?

A. I don't know as I can answer that.

Q. Was it while you were connected with the company?

A. As far as that is concerned, they were delivering their water there all of the time.

Q. When — you construct the division gates?

A. I think it was in the latter part of 1891.

Q. And from there up to the river was the Consolidated canal?

A. Yes, sir.

Q. And the Mesa is from the head gate, or rather from the division gates, down?

A. Yes, sir.

Q. And the water fall at the division gate was how much?

A. It was 4 feet and 11 inches—that is, from the Consolidated canal down to the Mesa.

Q. Did the water run over that fall all of the time until you left the employ of the company?

A. Yes, sir.

99 Q. Who constructed the division gates—that is, under whose superintendance was it?

A. Under mine.

Q. And that is the plan that is on the map there?

A. Yes; that is one part of it.

Q. Is that your plan?

A. Yes.

Q. And the fall of the water occurs in that structure at what point?

A. (Pointing to the map.) From there down.

Q. The structure extended below how many feet from where the drop was—about how many?

A. I don't remember, but it was some 14, 16, or 18 feet. I don't remember it exactly.

Q. At the place where the water drops over the gate it drops on the floor of the structure?

A. Yes, sir.

Q. And then what is the purpose of the floor at that point?

A. It is to keep the water from cutting the head gate out.

Q. You have to have that apron there in order to make it a complete head gate, do you not?

A. Yes, sir.

Q. I believe that is all.

Cross-examination.

By Judge STREET:

Q. You were the engineer that constructed the Consolidated
100 canal out of the old Mesa canal?

A. Yes, sir.

Q. And you were on the ground so as to see the old Mesa canal and to know its grade and bed?

A. Well, I didn't have much to do with the grade of the old Mesa canal. I have not investigated that much.

Q. Did you ever take the grade of that old Mesa canal?

A. Yes, sir.

Q. Was that a uniform grade?

A. No, sir.

Q. It was a variable grade?

A. Yes, sir.

Q. When the Consolidated canal was raised at the division gates five feet, what was done at the head of the canal, at the river, as to lowering or raising the head?

A. When that work was done, it was a short time after that flood that went in and cut out two miles of the old Mesa canal, and we had to rebuild it. Then that flood cut out the other two miles of the Mesa canal, and there wasn't much left.

Q. Whereabouts was the old head?

A. That flood cut it out from the head 2 miles down. It was in there (indicating).

Q. Is the present head of the Consolidated canal at the point of the old head of the Mesa?

A. Yes, sir.

Q. And it was cut down about 2 miles by the flood?

101 A. Yes, sir.

Q. In fixing the grade of the Consolidated canal was the floor of the canal or bed of the canal lowered or raised?

A. It was lowered.

Q. How much?

A. I don't know, because that flood demoralized things so that you couldn't tell. Of course the field-notes were there, but you ought to have some field points to know anything about it.

Q. Is the grade of the Consolidated canal less or greater than the grade of the Old Mesa canal?

A. It is less.

Q. By how much?

A. The difference is about five feet in 7½ miles.

Q. That is, there is five feet less grade in 7½ miles of the canal?

A. Yes, sir. I put in two grades into the Consolidated canal (indicating upon the map). It runs down. I cannot tell where it stops here, but I think the upper grade, where it climbs the Mesa, is 2½ feet, and somewhere along in here I changed the grade to 2 feet to the mile, and then run down to the division gates on the 2 foot grade, but where the two-foot grade commenced I don't know.

Q. How far above the old Ayers head gate does the grade at the rate of 2 feet per mile commence?

A. I couldn't tell. It is somewhere along in section 1, town 2 north and range 5 east.

102 Q. Do you know the distance between the old Ayers head gate and the division gate?

A. No, sir; I have never measured it.

Q. You were on the canal and superintending the construction of it all of the time it was being constructed?

A. Yes, sir.

Q. And the work commenced in the early part of 1890?

A. I don't know whether it was in 1890 or not.

Q. When was it finished?

A. In the early part of 1892.

Q. How long was it in the work of completion—all of 1890 and 1891?

A. I think I begun the work in 1890.

Q. Did you stay with it till it was completed?

A. It was completed down to the division gate, and I built most of this cross-cut, and the west and the east branch also.

Q. Look at that upper map on the rack there. How far below the Ayers head gate was there a departure from the old Mesa canal bed?

A. It was a part of it above.

Q. How far above?

A. I think the distance above was about as far as it was below.

Q. How much of the old canal did you leave out at that point?

A. About one-third of a mile.

Q. During the time of the construction of the new portion of the Consolidated canal, where you departed from the old canal,
103 state whether or not the water was run down through the old Mesa canal.

A. Yes, sir.

Q. State whether it was run down through that portion of the old Mesa canal into which the nes Consolidated portion to the head gates extends (illustrating upon the map). For instance, we leave the old Mesa canal here—and the dredger came across simply here—because we couldn't get dirt enough to build up the banks.

A. Yes, sir; we made a cut across here.

Q. State whether you didn't run water down through the old portion of the Mesa canal and into the new portion od the Consolidated canal to the head gates—I mean division gate.

A. That wasn't built until we got through cutting through here to build it.

Q. But the water went through the division gate before you left it?

A. Yes, sir.

Q. Was that the same water that came down through the old portion of the Mesa canal?

A. Yes, sir; the division gate was built before the dredger got down there; then they made the connection with the old Mesa here, and then that portion of the division gate—please repeat the question again.

Q. When the new gates were constructed, did any water come down through the Ayers head gate into the new Consolidated canal and then over the gates?

A. I don't know. I don't remember where the dredger was
104 or whether it got back into the old canal or not when the new gates were finished. I think when we finished they had got back into the old line of the canal past that point.

Q. Then you don't know whether water run over the gates at the division gates which came down from the old Ayers head gate or not?

A. (Indicating upon the map.) While we were cutting through here, I think they did, but I didn't notice when we passed this point—I don't know the particular time when the dredger passed there.

Q. When was the division gate put in with reference to the division gate up at the Ayers head gate?

A. The division gate was finished when the dredger passed this point, but how far up above that division gate it was, I don't know. I think that the dredger *dredger* had gotten through this cut-off and had got into the old canal before the gates were finished.

Q. But the water did run through the Ayers head-gate portion of the ditch until after the new portion was completed?

A. Yes, sir; until they made the connection there and filled it up.

Q. Did you ever hear anything at all about the construction of any machinery?

A. Yes, sir.

Q. That is during the construction of the canal?

A. Well, not while I was on it.

Q. State whether or not you were instructed to build that canal and raise the grade with reference to the accumulation of any
105 water power for the purpose of the propulsion of any machinery.

A. I don't remember of it. I don't remember any water-power talk but once, I think, and I am not positive about that once; but I think I made the remark to Dr. Chandler one day that with the proper kind of a wheel he could get a good deal of power with a five-foot fall.

Q. And that was your suggestion?

A. Yes, sir.

Q. Was that after the division gates were in?

A. I don't know; I think not. I think it was before.

Q. Were those division gates constructed with reference to putting in any water power?

A. I don't know anything about that.

Q. Was the construction by you with that in view?

A. No, sir; the main view was to raise all of the water here at this section line (indicating upon the map) in order to bring it out around this eastern extension.

Q. And onto the west also?

A. Well, that is two feet lower than this.

Q. Do you know how far the level of the Consolidated is below the surface of the ground on either side of the canal?

A. It is the same on each side of the canal, because the ground is level.

Q. Then how much below the surface of the ground does the bed of the canal lay?

A. On this side—on the west side of the cross-cut—it is
106 1 ft. 10 inches lower than the grade of the Consolidated canal, and the cutting there is somewhere in the neighborhood of 2 feet; that would be 3 feet and 10 inches below the grade of the Consolidated canal.

Q. How about the eastern branch?

A. Well, the eastern branch is on the same grade as the Consolidated canal.

Q. I will ask you again if you know how far below the surface of the land on each side of the canal is the bottom of the Consolidated canal.

A. I couldn't tell you, but I suppose that it is about 2 feet below.

Q. How far below the surface of the land is the bed of the old Mesa canal just below the division gate?

A. It is five feet lower than the grade of the Consolidated canal—that is, 4 feet and 11 inches.

Q. But you don't know how much it is below the surface of the ground on either side?

A. No, sir; I didn't test it; but, of course, the field-notes in this survey would give it exactly, but I have not got them.

Q. Do you know anything about an old check that was in the old Lewis ditch at the Mesa canal?

A. No, sir; I never had anything to do with that.

Q. Do you know anything about a check put in the old Mesa canal at the Ayers head gate?

A. I have never seen it.

Q. Do you know anything about the old Ayers lateral?

107 A. Only what I have seen on the ground.

Q. You never took any measurements of it?

A. No, sir.

That is all.

Cross-examination waived.

Witness excused.

Mr. W. H. COAD, being duly called, resumed the stand for further direct examination, and testified as follows, to wit:

Examination by Judge POPE:

Q. You were on the stand yesterday in this case?

A. Yes, sir.

Q. Have you been back to the canal since you have testified in this case?

A. Yes, sir.

Q. Have you gone to the point where the committee of the Mesa Canal Company established the high-water mark in the old Mesa canal?

A. Yes, sir.

Q. Were you there this morning?

A. Yes, sir.

Q. Who was there with you?

A. Mr. Newell, and Mr. Kimball, and Sam. Davidson, and his assistant engineer, Mr. Strites.

Q. Was Mr. Trott, the water commissioner appointed by

108 the court, there?

A. Yes, sir.

Q. Did all of you go to the place which you testified about yesterday as the stake indicating the high-water mark at the Ayers head gate?

A. Yes, sir.

Q. Did you all examine it?

A. I couldn't speak for Mr. Trott, but the rest of us examined it.

Q. Please explain its appearance or condition to the court. Take Plaintiff's Exhibit No. 2, map.

A. The point set by the committee is at the back of that blue line, and we went back and verified the elevations on this map, and it is approximately correct—that is, within an inch or so.

Q. State whether or not the index or high-water mark is plain.

A. Yes, sir; it is plain.

Q. You say that there is no mistake about where it could have been?

A. No, sir; it shows plainly.

Q. The same stake is there, as was proven by the committee and as testified to yesterday?

A. Yes, sir.

Q. From that water level what is the number of feet from the high-water mark in the Consolidated canal opposite to this point?

A. It is between 5 and 6 feet.

Q. Is it over five feet when the canal is well filled?

A. Yes, sir.

109 Q. And if the water level was reduced one foot it would be reduced here one foot?

A. Yes, sir.

Q. The fall of the water down to the head gate is about two feet per mile?

A. Yes, sir.

Q. In both canals, the old Mesa and the Consolidated?

A. Yes; they are approximately the same.

Q. I believe that you stated on yesterday that the relative grade or elevation of the Mesa canal at the Ayers head gate and that of the Consolidated canal at the division gate; state that again.

A. Do you mean the elevation of the water?

Q. Yes, sir.

A. (Pointing to the map.) This red line represents the height of the floor of the division gates.

Q. Then the floor of the division gate of the Consolidated canal is above the high-water mark?

A. It is 2 inches lower than the water mark at the Ayers head gate.

Q. But in coming from the Ayers head gate down to the Consolidated you have to loose one foot?

A. Yes, sir; and that would be lost in both canals.

Q. Then, in allowing a foot fall, the bottom of the division gate would be something like one foot above the high-water mark of the Mesa canal at Ayers' head gate?

A. Yes, sir.

Q. What is the elevation of the new lateral that was built

110 by the defendant company as compared with the east branch?

A. It is run on the same grade. It started out on the same level and run on the same grade.

Q. And that comes out below the division gate?

A. Yes, sir; about 50 feet below it.

Q. Then the bottom of the lateral is as high as the bottom of the Consolidated canal?

A. Yes, sir; but as the first 600 or 800 feet of that lateral, the cut being very light, they had to go down below grade to get the material with which to build up the banks, so their cut stands in a little below the true grade.

Q. You had something to do with the running of that level for them, did you?

A. Yes, sir; I calculated for this canal to start out on the same grade as the floor of the cut.

Q. And that starts out with the same level as the Consolidated above the head gate?

A. Yes, sir.

Q. Wiping out the five-feet fall?

A. Yes, sir.

That is all.

Cross-examination.

By Judge STREET:

Q. Whereabouts in the old Mesa canal was this stake set?

A. It is where the old Ayers ditch leaves the Mesa canal.

Q. Where with relation to the Ayers head gate? Where was it?

111 A. It was above it.

Q. How far above?

A. Not very far; I didn't measure the distance, but perhaps it was about 15 or 20 feet.

Q. And what was the difference in the elevation from the top of that stake and——

A. (Interrupting.) The top of the hub?

Q. And the bottom of the new Consolidated canal, at the same relative point?

A. The bottom of the Consolidated canal at this point—the middle of the true grade of the Consolidated at that point would be one foot higher than the hub—that is the true grade of the canal at that point.

Q. Then the elevation would be one foot higher in the Consolidated canal than at the hub of the stake in the Ayers ditch?

A. Yes, sir.

Q. And you told us yesterday that the difference in the elevation between the bottom of the Ayers canal and the Consolidated canal at an equivalent point is five feet or such a matter?

A. Yes, sir.

Q. You also said to us that the new Lewis ditch is on the same grade as the east Consolidated branch?

A. Yes, sir. The grade started out on the same grade as the bottom of our cut, but it is dug below for the first few hundred feet.

Q. And it is different between the new Lewis ditch and the Consolidated canal at the division gate?

112 A. Yes; there is something between 5 and 6 inches difference in the floors of the gates. The surface gate of the gates in the new east ditch is lower than the head of the division gate.

Q. Yesterday you were not able to tell us exactly where the difference in the grade in the Consolidated canal commenced; can you do it this morning?

A. There are two grades in the Consolidated canal between the river and the division gates—two changes in the line.

Q. Yes, sir.

A. There may be more than that. Well, it is a fact that in establishing the grade the lower end of the canal was raised and the upper end of the canal was sunk—that is, in changing the grades of the old Mesa canal into the present grade of the Consolidated, the bed of the canal at the lower portion of it was raised up five feet.

Q. At the banks?

A. Yes, sir.

Q. And then raised on up a certain distance above it?

A. Yes; we raised the banks all along.

Q. How about the bed of the canal?

A. We didn't change the bed at all.

Q. Then, the only change is in the banks?

A. Yes, sir.

Q. Now, isn't it a fact that up near the river the bed of the canal was sunk or made lower, so that the head was made lower?

A. Perhaps so; I am not sure what the grade was at that
113 point. It was washed out so many times it is hard to tell what was the true grade.

That is all.

Redirect examination.

By Judge POPE:

Q. You spoke a moment ago about raising the banks. Didn't the bottom of the canal change?

A. May I show what I mean by this profile?

Q. Yes.

A. (Exhibiting profile No. —.) This is a profile of the bottom of the old Mesa canal, showing also our grade; this is five miles long. We started out at a point known as the old head gates—five miles above our division gates—and this red line represents our grade, and this blue line represents the grade as we found it at that time. There was considerable silt in there—that is, not their grade—but we followed along down this way and we kept getting farther above the other grade, and finally, when we got in here——

Q. (Interruption.) How did you get above that?

A. We hadn't paid any attention to the Mesa at the bottom, but simply raised the banks, for we knew that the bottom would fill in in time.

When we got to the point here we come to the Mesa canal, and they had a very great fall at this point, known as the Taylor's falls, and that black line shows it very exactly. At this point, two miles from the division gate, the grade of the Mesa was four
114 feet below the grade of our canal. This continues on up to about 4 feet below, for all along that it is difficult side-hill work until we get to the point where we made the through cut, and at this point we left the Mesa canal.

This is the bottom of the old Mesa canal, and we made a cut of about ½ mile or so. Here is where it is cut a little below the grade,

but it was hard to do that, so then we joined in again at this point. This was approximately the grade, but it shows in the neighborhood of four or five feet difference in the grade; then we put our gates in here at the end. The Mesa canal grade was taken like that, so we didn't touch the bottom of the Mesa canal, but we built up our banks, and then we put in our gates and graded up the canal, and the silt filling in the bottom has now about brought it up to our grade.

Q. The depression was filled by the silt?

A. Yes, sir.

Q. You just raised the banks, and the water did the rest?

A. Yes, sir.

That is all.

Recross-examination.

By Judge STREET:

Q. This black line at the point you call through cut is approximately as high as the red line at the through cut?

A. It is between one foot and a foot and a half lower.

Q. Then the distance is how much?

A. One-half a mile.

115 Q. And that is in the neighborhood of Ayers' head gate—that thorough cut?

A. Yes; that extends down further. This is a part of it.

Q. It is parallel with the old Ayers head-gate portion of the canal?

A. Yes, sir.

Q. And at that point and along that portion of the canal there is a difference of only about a foot?

A. That is between the true grade and the grade as it is now.

Q. That is between the grade of the old Mesa canal and the grade of the Consolidated?

A. No, sir; this is our grade. I said that we left the old Mesa grade at this point and we didn't cut it again till we got through here (indicating).

Q. Then there are no black lines showing the grade from station 230 to 260?

A. No, sir.

Q. (Pointing to the map.) Does this black line represent the grade of the Mesa canal?

A. That is as we found it at that time. The grade might have been below that.

Q. What is the blue line?

A. This is the water line. There was only a few hundred inches in the canal at that time.

Q. Do I understand that that represents the bottom of the Mesa canal, except as between the stations 230 and 260?

116 A. Down in there (pointing to the map). I am not sure how closely we followed that old Mesa canal in that vicinity.

Q. Did you take any measurements of the Mesa canal along through the portions of the canal that this profile exhibits?

A. Of course, this is all of the Mesa, and this part is filled up some with silt.

That is all.

By Judge POPE: That is all.

Witness excused.

SAMUEL A. DAVIDSON, Esqr., a witness duly called, sworn, and examined, testified upon his corporal oath as follows, to wit:

Examination by Judge POPE:

Q. You may state your name and residence.

A. My name is Samuel A. Davidson, and I reside in Phœnix, A. T.

Q. What is your business?

A. I am a civil engineer and surveyor.

Q. How long have you been engaged in that business?

A. For 17 years.

Q. How long have you been engaged in that business in this county?

A. Ten years.

Q. Do you know the canal known as the Consolidated canal in this county?

A. Yes, sir.

Q. Have you been there and seen it a number of times?

117 A. Yes, sir.

Q. You have been acquainted with it for how many years?

A. For four or five years.

Q. Did you know the old Mesa canal that was there?

A. Yes, sir.

Q. When did you last see the Consolidated canal?

A. This morning.

Q. Were you there in company with Mr. Coad and the other gentlemen that he mentioned this morning?

A. Yes, sir.

Q. To what point did you go?

A. To the division gates.

Q. Did you also go up to the Ayers head gate?

A. Yes, sir.

Q. Did you examine the premises there and see where the high-water mark was of the old Mesa canal?

A. Yes, sir.

Q. Can you tell from your inspection of the ground and the banks where the high-water mark of the old Mesa canal was?

A. Yes, sir; very closely.

Q. Did you see the stake that was driven into the ground as the established mark?

A. Yes, sir.

Q. Where is that stake located?

A. It is on the east bank.

Q. Is it above Ayers' head gate?

118 A. Yes, sir.

Q. Does that stake appear to have been driven there some time ago?

A. Yes, sir.

Q. It is not a fresh-driven stake?

A. No, sir.

Q. Can you indicate upon this plaintiff's map No. 2 where that stake is?

A. That is not a map.

Q. Well, we lawyers call it a map. What do you call it?

A. (Witness examining maps.) It is indicated on defendant's map No. 1 (pointing). It is right at this point where the old Ayers ditch was taken out.

Q. It is the ditch called the Ayers ditch?

A. Yes, sir.

Q. Is that ditch now in use?

A. No, sir.

Q. Is it in a condition for use?

A. No, sir.

Q. It is an abandoned ditch?

A. Yes, sir.

Q. How deep is the water in the old Mesa ditch at the point of that stake, measuring from this high-water mark to the bottom?

A. It is about four feet.

Q. The water would have to be about 4 feet deep to get up to that high-water mark?

A. Yes, sir.

119 Q. What is the relative height of the high-water mark in the old Mesa ditch at that point with reference to the Consolidated canal opposite to it?

A. It is $\frac{35}{100}$ths of a foot higher at the Ayers ditch than it is at the floor of the division gate.

Q. That is how many inches?

A. It is about 4 inches.

Q. It is four inches higher than the bottom of the Consolidated canal?

A. Yes.

Q. And the fall of that from that point down to the division gate is how much? Is it about a foot?

A. No, sir.

Q. The fall in the canal from that point of the Ayers head gate down to the division gate is about a foot?

A. No, sir; the bottom of the Ayers ditch is lower than the division gate.

Q. Yes, that is true; but I was asking you about another point, taking into consideration the grade of the canal—from the point opposite to the Ayers head down to the division gate.

A. I didn't take that.

Q. What is the difference in the elevation of the two canals at the division gate?

A. It is 4½ to 5 feet. It is hard to tell where the old bottom is.

Q. Taking the Mesa canal below the division gate of the
120 Consolidated down to the division gate, the difference is between 4½ and 5 feet?

A. Yes, sir.

Q. How was that fall produced?

A. By this Consolidated canal being raised.

Q. In the construction of the Consolidated canal on a less grade than the Mesa canal?

A. Yes, sir.

Q. Supposing there is a drop at the division gate in the water, this being delivered by the Consolidated canal into the Mesa canal of about five feet, what would be the effect of putting a stop or check dam below the division gate in the Mesa canal?

A. It would check the flow of the water in the Consolidated canal.

Q. If you raise the surface of the water in the Mesa canal below the division gate up even with the bottom of the division gate of the Consolidated, the effect would be to check the flow of the water?

A. No, sir; if the surface of the water below is even with the bottom of the Consolidated canal, there would be no check; it would have to be above—that is, the surface of the water.

Q. The surface?

A. Yes, sir.

Q. Do you know how deep the water is in the Consolidated canal at the division gate? That varies with the amount of water in the canal?

A. Yes, sir.

121 Q. It might be one or three or four feet?

A. Yes; or it might be 6 or 7 feet.

Q. If it is low water it would be less? According to the amount of water in it?

A. Yes, sir.

Q. There is about feve-feet fall into the Mesa canal?

A. Yes, sir.

Q. Did you notice the check-dam, a wooden check-dam that they have below their lateral ditch?

A. Yes, sir.

Q. What is the effect of that upon the Consolidated canal?

A. As I found it this morning, it checked the water into the Consolidated canal.

Q. How far back does that operate upon the Consolidated?

A. If the grade was uniform clear to the head, it would effect it clear through.

Q. Would it retard the flow of the water in the Consolidated canal?

A. Yes, sir.

Q. If it is built upon a two-foot fall per mile, and it is checked up there, it takes off the grade clear to the head?

A. Yes; that is, if the surface of the water in the canal is uniform.

Q. Suppose it is uniform for three miles at the grade of 2 feet to the mile, what would be the effect?

A. It would retard the flow.

122 Q. And that would diminish the carrying capacity of the canal?

A. Yes, sir.

Q. And it would cause a deposit of silt in the bottom of the canal?

A. Yes.

Q. And it would increase the danger of breaking the canal?

A. Yes; if it is running full.

Q. If it was full, what would be the danger with respect to its breaking the banks?

A. It would be dangerous.

Q. To give the outlet a drop at the division gate, how does that effect the matter of the grade of the canal?

A. It doesn't effect it much; it really don't cut off one foot, only it is a check of one foot.

Q. That is the general effect of a drop of one foot into the division gate, with respect to the fall of the water?

A. It makes it run faster.

Q. Do you know the land called the Ayers land?

A. No, sir.

Q. It is the land lying under that abandoned ditch.

A. I know the land.

Q. Do you know how it lays with reference to the water levels?

A. I know the land there, but I don't know whether that is the Ayers land or not.

Q. We will call it the Ayers land. Did you take any measurements there?

123 A. Yes, sir.

Q. Tell us what you found there.

A. Taking the high-water mark in the Mesa canal at the head of the Ayers ditch, it was $\frac{24}{100}$ths of a foot higher than the surface of the ground at the point claimed to be the Ayers land.

Q. The high-water mark was ¼ of a foot higher than the Ayers land. Was that the land called the Ayers land?

A. Yes, sir.

Q. What is the distance from the Ayers head gate?

A. It is ¾ of a mile or farther.

Q. Is that fall sufficient to fill it with water and irrigate from that ditch?

A. Well, it would run some.

Q. But you would have to dam it up at the head to make it run?

A. It would run at that.

Q. A small lateral ditch with ¾ of a foot fall to the mile. Is that practicable for irrigation purposes?

A. No, sir.

By the COURT: You will have to assist me now a little. I don't hitch on this testimony with anything that is set out in this complaint. What has that ditch got to do with it?

By Judge POPE: Very well. I was going to ask no further questions about that, but I wanted to show that that dam and that the flow of the water in the Mesa was abandoned before the consolidated canal was constructed. That is what we propose to show. It only bears upon the question of the height of the Mesa ditch at
124 the Ayers head gate.

That is all.

Cross-examination.

By Judge STREET:

Q. You say that there is about four feet difference in the elevation between the point at the stakes indicating the high-water mark and the bottom of the Mesa canal?

A. Yes, sir.

Q. You measured that this morning, you say?

A. Yes, sir.

Q. How long has it been since that canal was used at that point?

A. It may be three or four or five years.

Q. To what extent has it been filled up?

A. There is a little sand in there.

Q. Do you know whether you got down to the very bed of the canal or not?

A. I felt around with my foot for the bottom.

Q. And that is the only way you have of knowing whether it was the bottom or not?

A. Yes, sir.

Q. You don't know to what extent it was filled up with silt at that point?

A. No, sir; but there was sand on the bottom.

Q. You didn't get through the sand?

A. No, sir; but I think I was on the bottom. It seems pretty hard to tell where the bottom is.

125 Q. What was the condition of the banks at that point as to their height?

A. They were higher than the high-water mark.

Q. How much higher?

A. They were uneven—up and down.

Q. But the general line was enough to indicate the general line of the bank?

A. Well, it was pretty hard to tell that.

Q. How far below the general line or general elevation of the bank was this stake—the point that you measured?

A. It might be one and a-half or two feet, and 2½ feet in places on the lower side.

Q. Do you think the general line of the bank was as much as three feet at that point?

A. Hardly.

Q. Was it as much as 2½ feet?

A. It might be that high.

Q. Do you know the difference in the elevation between the bottom of the Mesa canal and the bottom of the Consolidated canal at the Ayers head gate?

A. I can tell you pretty close to it. Do you want it just below the division gate?

Q. No, sir; I want to know if you know the difference in the elevation between the bottom of the old Mesa canal at the Ayers head gate and a relative point on the Consolidated Canal Company's canal?

126 A. From the point I took the measurement it is 3.62 of a foot lower than the Consolidated.

Q. That is, 3 feet and $\frac{62}{100}$ths of a foot lower than the Consolidated?

A. Yes.

Q. What point did you take it at?

A. For the Mesa ditch at the Ayers head.

Q. And that is what relative point on the Consolidated?

A. I took it there at the floor of the head gate.

Q. That is the division gate of the Consolidated canal?

A. Yes, sir.

Q. Then there is 3 feet and sixty-two hundredths of a foot difference between the bottom of the Ayers head gate and the division gate?

A. Yes, sir—that is, the ditch out where the Ayers ditch comes out is that much lower.

Q. Now, then, you confuse me. Can you point on the map there what you mean?

A. Yes. The elevation—we run these levels, assuming an elevation of 10 feet, and started on the floor of the division gate if the Consolidated canal and the elevation of the bottom of the canal at the Ayers ditch is 6 $\frac{38}{100}$ths.

Q. (Pointing upon the map.) That is this point here?

A. Yes; that is the elevation—6.38 when the division gate has an elevation of ten feet.

127 Q. And that amounts to a difference of 3.62 feet here?

A. Yes, sir.

Q. That is, the Ayers head gate is 3.62 feet lower than this other division gate?

A. Yes, sir.

Q. Do you know the difference in the elevation of the bottom of the Mesa canal at the Ayers head gate and then going right across the country to the Consolidated canal to a relative point on that canal?

A. No, sir.

Q. You say that the water that would be backed up by that check that is now in the Mesa canal which is below the division gate would back the water clear to the river if the surface of the water was uniform?

A. Yes, sir.

Q. Do you know how far it does back it up?

A. No, sir; I don't know whether there are any checks there or not.

Q. You don't know whether it gets back ¼ or ½ a mile or what distance?

A. I believe that it comes back more than ¼ of a mile.

Q. Let us assume that this ruler represents a certain grade of the canal, and that the check is put in below so as to back the water against the division gate, which would be the end of this ruler, the distance that that would back the water—the water, would it have been on the grade of this canal or the ruler?

A. Yes, sir; it depends upon the uniformity of it.

128 Q. If the Consolidated canal people have raised their canal five feet at the division gate, and at the same time have lowered the grade at the head, so as to make the water in the canal run more sluggish, in making a check below the division gate, the water would back further along the canal than it would have backed under the old Mesa grade?

A. No, sir.

Q. Why not?

A. There is 2 miles down from the old head that there is considerable fall, and that they have taken up.

Q. How?

A. By reason of the line of their ditch. In other words, they have distributed their grade, and then it was irregular.

Q. Do you know whether there is any difference in the elevation between the division gates and the head of the canal?

A. No, sir.

That is all.

Redirect examination.

By Judge POPE:

Q. Mr. Davidson, you have given a difference in the elevation of the two points, the one at the Ayers head gate and the other at the division gate at 3.62? *A.* That is, it is so much higher at the division gates of the Consolidated canal than it is at the old Mesa canal at the Ayers head gate?

A. Yes, sir.

129 Q. Supposing the difference between those two points is ½ mile, and that the grade of the canal is 2 feet to the mile, then you would ascertain the relative elevation as one foot more difference in the elevation?

A. Yes, sir.

Q. You have given the difference in the elevation between the Ayers head gate and the Consolidated canal as 3.62 feet?

A. Yes, sir.

Q. Supposing that the Ayers head gate is ½ mile above the division gate, and suppose that the fall in the Consolidated canal is two feet to the mile, what would be the difference in the elevation at the Ayers head gate and a corresponding point on the Consolidated canal?

A. It would be 4.62 feet.

Q. Then the Consolidated canal would be 4.62 feet higher than the other point?

A. No, sir; but the surface of the water would be that much higher than the bottom of the Mesa ditch at the Ayers head gate—that is, a difference in the grade lines.

Q. The Consolidated would be that much higher at that point?

A. Yes, sir.

That is all.

Cross-examination.

By Mr. FRAZIER, counsel for defendant:

Q. But you don't know whether that is true or not, do you?

A. No, sir.

130 Q. You didn't measure to see if that is true?

A. No, sir.

That is all.

Witness excused.

Mr. WILLIAM M. NEWELL, a witness having been duly called, sworn, and examined upon his corporal oath, testified as follows, to wit:

Examination conducted by Judge POPE:

Q. You may state your name, age, and residence.

A. My name is William Newell; age, 47 years; and I reside at Mesa City, this county.

Q. How long have you resided there?

A. It will soon be 19 years.

Q. Are you a stockholder in the Mesa Canal Company?

A. Yes, sir.

Q. For how long have you been a stockholder in that company?

A. Ever since it was built.

Q. Have you ever been a director in that canal company?

A. Yes, sir.

Q. For how long a time?

A. I don't remember, but probably for two or three years.

Q. Were you a director at the time the Consolidated canal was constructed down to the division gates?

A. Yes, sir.

Q. Who was president at that time of the Mesa Canal Com-

131 pany?

A. I don't remember.

Q. Wasn't it Mr. W. N. Standage?

A. Yes; I think it was.

Q. You were one of the directors and he was the president?

A. Yes, sir.

Q. And there was three other directors?

A. Yes; there was five of us.

Q. Did you ever have anything to do with the construction of the Consolidated canal down towards Ayers' head gate or the division gate?

A. Yes, sir.

Q. Did Mr. Standage assist in doing work upon it or cleaning off the ground?

A. He assisted in cleaning the ground.

Q. It was done—that is, the rough work was done by the dredger?

A. Yes, sir.

Q. State at what point the Mesa canal has received its water from that time to this?

A. It is at about ¾ of a mile below, at the division gate.

Q. And you have never known any other practice since that head gate was constructed, have you?

A. No, sir.

Q. There was no objection by anybody at the time this construction was going on to that plan?

Defendant objects to the question as leading, and for this reason that would not be binding upon us unless they proved the
132 legal consent of the defendants. If that was within the scope of the power of the director-, it would be so, but their act was *ultra vires* and it is not binding upon the corporation. We insist upon the proof of the legal consent.

By Judge POPE: The question relates especially to that part of the canal extending from the division gate up beyond the Ayers head gate.

By the COURT: Isn't that within this contract?

A. No, sir.

By Judge STREET: The contract was being entered into before it was signed, and the stockholders had a meeting to authorize the directors to make a contract with Dr. Chandler for an enlargement of the canal from the Ayers head gate to the river, and they have made other agreements about the relative rights of the water. We insist that they have no rights that they can insist upon below the Ayers head gate, and when they came down here and constructed some 3,000 feet further down, they did it without the consent of the stockholders, and only by permission of some of the directors and against the protests of the stockholders, and whatever rights they have is by permission.

Now they undertake to say whether there was any consent or not. If they mean a legal corporation consent, that is right; but the question does not contemplate that.

The objection was overruled by the court and defendant excepted.

By Judge POPE: Repeat the question.

133 By the REPORTER:

Q. There was no objection by anybody at the time this construction was going on to that plan?

A. No, sir; not that I know of.

By Judge POPE: Where did the directors reside at that time?
A. Near Mesa city.
Q. Within a mile or two from your place?
A. Yes, sir.
Q. Where did the stockholders live?
A. In the same place and around there.
Q. (Pointing to the map.) This place is along the public highway and leads—going in all directions?
A. Yes, sir.
Q. And there are people traveling through there every day?
A. Yes, sir.

By the COURT:

Q. And within the distance referred to—between the Ayers head gate and the division gate—does the Consolidated canal, as now constructed, or did it use any part or parcel of the bed of the old Mesa canal?
A. Yes, sir.
By Judge POPE: It is something less than ½ mile?
A. Yes, sir.
Q. You were there, weren't you, during the construction of that part of the canal?
A. Yes, sir.
Q. Do you know whether the Consolidated canal was constructed at a greater elevation than the old Mesa canal?
131 A. Yes, sir; it was.
Q. How much is the difference?
A. It is between 4 and 5 feet.
Q. Now, some distance below the division gate there is an old lateral ditch called the Lewis ditch, is there not?
A. Yes, sir.
Q. And they took water out of there to irrigate some lands on the east side?
A. Yes, sir.
Q. Now, what do you know, as a director of the canal company, as to the practice of the Mesa canal regarding the old Lewis ditch—what was necessary to get water into that ditch?
A. It was necessary to check it up.
Q. It was necessary to put a check into the Mesa canal below the old Lewis ditch?
A. Yes, sir.
Q. What did the company do with regard to allowing that to be done?
A. They objected to it because it obstructed the flow of the water above and backed the water up, and because sediment would be deposited, and they claimed that it was liable to break the banks over.
Q. How much check did they desire to put in there below the old Lewis ditch?
A. That wouldn't allow it to go in there over 4 inches deep at that time.

Q. Did the people that had land along the line of that old
135 Lewis ditch want to put in a greater check than 4 inches?

A. Yes; we wanted to put it in high enough to get sufficient water to irrigate their land; they claimed that they could not get enough water with 4 inches check.

Q. And the company would not allow that for the reason that the flow in the Mesa canal was so sluggish that it would be a damage to the canal?

A. Yes, sir.

Q. And they wouldn't allow them to raise it a foot?

A. Well, that was at a time before Dr. Chandler had done much with the ditch.

Q. Do you remember the time when they made a temporary use of the ditch called the Ayers ditch?

A. Yes, sir.

Q. That is shown on plaintiff's map No. 1. How much was that ditch ever used?

A. It was only used some 5 or 6 times to prove up on that land.

Q. And that was before the Consolidated canal was constructed?

A. Yes, sir.

Q. Were you present when they tried to get water out of that lateral ditch to prove up on that land?

A. Yes, sir.

Q. What did they have to do?

A. They put a check in the Mesa canal below the Ayers lateral and held the water up to force it through this ditch, to get it out upon the lands.

136 Q. Describe the proceedings at that time. Was it necessary to run the water to a dangerous point in the canal to get the water out upon that land?

A. Yes, sir.

Q. You were connected with the Mesa ditch at that time and were present on the ground?

A. Yes, sir.

Q. Did you do anything to protect the ditch at that time?

A. Yes, sir; we had men on the banks of the ditch watching it to see that it didn't break over.

Q. That was while you were putting enough water upon the land to prove up on?

A. Yes, sir.

Q. Was it used after that time?

A. No, sir.

Q. Did the company ever allow that ditch to be used after that?

A. No, sir.

Q. Since that time to the present day that has been an abandoned ditch?

A. Yes, sir.

Q. When they took the check out that was put in below the Ayers head gate in order to prove up on that land, what did the water do?

A. The water run over the Ayers land ¾ of a mile below and back into the Mesa ditch and flowed off the other way.

Q. And as soon as you took out the check?

137 A. Yes; it then went back into the Mesa canal.

Q. Were you there this morning at the point called the Ayers head gate?

A. Yes, sir.

Q. Did you see the place where the stake was driven to show the high-water mark?

A. Yes, sir.

Q. What knowledge have you about that being the high-water mark?

A. The stake is higher than the high-water mark of the Mesa canal; higher than the water ever had been, only at the time when Ayers was proving up on his land.

Q. How much higher?

A. About 6 inches higher.

Q. Are there signs upon the bank there now to indicate where the high-water mark was?

A. Yes, sir.

Q. Something was said a while ago about the banks of the old Mesa canal being two or three feet higher. Look at this section line. Who put this raised piece of land along here that is called a bank of the old Mesa canal ditch?

A. The Consolidated Canal Company, or I did it for them.

Q. And that is what the old Mesa Canal Company had for their bank—the line indicated on this section map near the cross-section?

A. Yes, sir.

Q. This was their bank?

A. Yes.

138 Defendants object to this as leading and suggestive.

By Mr. FRAZIER: And the defendant objects to the counsel for plaintiff continually testifying and asking if this or that is not true. Let the witness state the facts; this is a very willing witness.

By Judge POPE:

Q. Very well. I believe you have already stated that this raised bank was put up by the Consolidated Canal Company and that it wasn't there at the time Dr. Chandler came here?

A. No, sir.

Q. You know, of course, of the construction of the new lateral ditch of the Mesa canal just below the division gate?

A. I do; yes, sir.

Q. What did the Mesa canal people do in regard to obstructing the flow of the water from what it flowed before?

A. They put in a brush and a rock dam and raised the water high enough to raise it into this new ditch, and as soon as they had taken that out they put in a lumber check a little lower down on the canal.

Q. How does this lumber dam compare with the height of the brush dam?

A. It is higher.

Q. What was the effect of that on the floor of the water at the division gate?

A. It backs it up and takes that fall mostly off, but there is some little fall left there.

139 Q. Yes, sir.

That is all.

Cross-examination.

By Judge STREET:

Q. When were you a director of the Mesa Canal Company, Mr. Newell?

A. It was about 4 or 5 years ago. I was a director up to the time the Consolidated canal was built—that is, the year of the construction of it.

A. When was the construction of the Consolidated canal commenced—what year?

A. In January, 1891.

Q. Wasn't it in January, 1890?

A. It was either in January, 1890, or January, 1891.

Q. Were you in the employ of Dr. Chandler during that year?

A. Yes, I was superintending the work of building.

Q. And also you were a member of the board of directors of the Mesa Canal Company?

A. Yes, sir.

Q. Were you a member of the directory during the time of the construction of the Consolidated canal?

A. No, sir; not all of the time.

Q. Were yo i a member of the directory during the construction of the canal from Ayers head gate down to the division gate?

A. Yes, sir.

Q. And also in Dr. Chandler's employ?

A. Yes, sir.

140 Q. When did the directory of the Mesa Canal Company make any objections to the check in the canal, below the point of the division gates, for the purpose of putting water into the Lewis ditch out of the old ditch?

A. At the time I was a director in this canal they objected to it.

Q. How many years were you a member of that directory?

A. Some 3 or 4 years.

Q. Did the directors as a body make any objection to it?

A. They did; not only the directors, but the stockholders.

Q. Was there any minute entry of these things made in the books of your company?

A. I don't know. The books will show that, perhaps.

Q. How much water was running into the Lewis ditch during those years?

A. I couldn't tell you.

Q. How much were they consuming in that ditch?

A. I might give you the number of shares. Perhaps there was forty shares.

Q. How much water was there to the share?
A. I don't know the amount of water they had to the share at that time.
Q. And they put in a check there?
A. Yes, sir.
Q. Now, how far did it back the water up into the Mesa canal?
A. They wouldn't allow it to go any more that 4 inches at that time.
141 Q. How far did that back the water into the Mesa canal?
A. I don't know.
Q. Did it do so for any considerable distance?
A. I couldn't say as to that, how far it was.
Q. Did it do any damage to the Mesa canal at that time?
A. It did not.
Q. You say that the check that is in there now raises the water pretty near to the floor of the Consolidated canal?
A. Nearly. It takes it quite a ways towards the floor.
Q. And you have seen the water there backed up, have you?
A. Not since they have had this new check in, but I saw it this morning; it was checked out, but not with a full head.
Q. How far did it back it up this morning?
A. It begins to drop by the division gate; I don't know to what height; I didn't measure it.
Q. But still it is not as high as the level of the Consolidated canal?
A. There looked to be a little drop there.
Q. Was that sufficient to run the water into the new ditch?
A. They had water in there.
Q. And the water was running in there?
A. Yes, sir.
Q. How full was it?
A. I didn't measure it.
Q. Was the water running down below the Mesa below that?
A. Yes, sir.
142 Q. And you don't know what portion of the water was running into the new Lewis ditch?
A. No, sir; I do not.
Q. Were the division gates up, allowing the water to run into the Mesa canal?
A. Yes, sir.
Q. Was there water also running into the east and west branches of the Consolidated canal?
A. No, sir.
Q. All the water that was going down was running into the Mesa canal and a portion of it was being distributed into the Lewis ditch?
A. Yes, sir.
Q. The gates were up?
A. Yes, sir.
That is all.
By Judge POPE: That is all.
Witness excused.

WILLIAM KIMBALL, Esqr., a witness, having been duly sworn according to law, was examined and testified upon oath as follows, to wit?

Examination by Judge POPE, on behalf of plaintiff:

Q. You may state your name.
A. My name is William Kimball.
Q. And you live at Mesa city?
143 A. Yes, sir.
Q. How long have you lived there?
A. About 19 years.
Q. Are you a stockholder in the Mesa Canal Company?
A. Yes, sir.
Q. How long have you been a stockholder in that company?
A. Oh, for some length of time.
Q. Were you this morning at the place called the Ayers head gate?
A. Yes, sir.
Q. You were there at the time the surveyors were there?
A. Yes, sir.
Q. Did you see the stake that is driven into the ground there indicating the low and the high water mark in the Mesa canal?
A. Yes, sir.
Q. Did you have any knowledge beforehand where the high-water mark of the Mesa canal was?
A. No, sir.
Q. And you saw this morning from the appearance of the banks where the high-water mark of the old canal was?
A. Yes, sir.
Q. State whether or not that stake is practically driven at the high-water mark or where the high-water mark is with reference to that.
A. The stake is higher than the high-water mark of the old Mesa canal at that point—about 6 or 8 inches.
Q. Were you present at the time they put water on the
144 Ayers land to prove up on it?
A. No, sir.
Q. Do you know whether that ditch called the old Ayers ditch has been used for irrigation purposes since the time they proved up on that land?
A. Yes; I think it has.
Q. When?
A. Several years ago. I think before the Consolidated canal du*h* — and them moochers — water went through there.

By the COURT: I would like to know the correct idea of why this testimony is introduced.

By Judge POPE: We understand the truth to be, that at one time they tried to have the high-water mark there sufficiently high to operate through the old Ayers ditch to irrigate some lands there, and they have abandoned it because they couldn't maintain it that

high in the old Mesa ditch, but it is probably not material in this case.

By Judge STREET:

Q. We say that they have not made one at any time between the Ayers ditch and the division gate?

By Judge POPE: That is so. We have not made anything; we admit that; but we will pass on to another point.

Q. Do you know anything about the use of the Lewis ditch?

A. Yes.

Q. Do you know whether the company allowed check-gates there, to-?

A. Yes; they finally allowed them.

145 Q. How much of a check is it?

A. I don't know. I know there was an objection.

Q. Do you know the grounds of the objection?

A. Yes, sir.

Q. What was it?

A. They didn't want the water backed up on account of the quality of the soil, and the banks of the canal was so very meagre at that point, and if they put in the check at that point they thought the banks wouldn't hold it.

Q. Did you reside at Mesa at the time of the construction of the Consolidated down to the division gates?

A. Yes, sir.

Q. And you were generally known in the community?

A. Yes, sir.

Q. Were you a director of the company at that time?

A. Yes, sir.

Q. When were you a director of that company?

A. In 1885.

Q. Then you were not a director in 1891?

A. No, sir.

That is all.

Cross-examination.

By Judge STREET:

Q. The objection to putting in a check in the Mesa canal for the Lewis ditch—the general objection—was the same as to putting in a check anywhere, wasn't it?

146 A. Yes, sir.

Q. There was no special objection to putting a check to the Lewis ditch?

A. No, sir.

Q. There was no special damage that was contemplated as the result of putting in a check there?

A. No, sir.

Q. But the rule was that if you had to put it in for one you would have to do so for another?

A. Yes, sir.

Q. And it makes it more expensive in cleaning. That is the only objection, is it not?

A. Yes, sir.

Q. When this was put in, do you know how far that backed the water in the Mesa canal?

A. No, sir.

Q. Was it for any perceptible distance?

A. Yes. The canal, from the time it enters the old Montezuma cut—that is, it starts in at the Ayers head gate, and the water runs very sluggish there. The water coming along above there—there was a drop above that line within ½ mile of some 3 feet, and that gave the water a volume that would carry it out through this cut; otherwise there would be sluggish or what we would call dead water.

Q. What was you saying about the Montezuma cut?

A. I said that the water was sluggish there.

147 Q. How far did the water back up after that check was put in?

A. What check; the one at the Lewis ditch?

Q. Yes; the old check.

A. I don't know.

Q. You didn't observe that?

A. No, sir.

Q. I asked you a moment ago if it was considerable distance, and then you commenced talking about the Montezuma cut.

A. Well, it backed up to a certain grade of the ditch, and after a while they raised it again.

Q. Do you know the purpose of building this new Lewis ditch?

A. Yes, sir.

Q. What was it?

A. It was to water new lands in there.

Q. How much new land is now watered by it?

A. Oh, considerable.

Q. Can you point out on this map what new lands are irrigated by it?

A. (Pointing to the map.) It would take nearly all of this land above the old Lewis ditch and the new one.

Q. Does the new ditch run into the old one?

A. Yes; a branch of it does.

Q. Do you know where?

A. I think it is on my land. It is in section 13.

Q. What was the necessity of building the new Lewis ditch besides the purpose of bringing in new lands under cultivation?

148 A. I don't know of any other, only to make a better ditch and to raise the water higher.

Q. Do you know whether the lands under the old ditch could be as well irrigated by that ditch?

A. No, sir; I know that mine could not and others couldn't.

Q. To what extent is that condition there?

A. I couldn't say, but it is considerable.

Q. You don't know how long the Ayers ditch was used, do you?

A. No, sir; but I think it was for about two months.
Q. Was it ever used more than one season?
A. I don't think so. I don't think it was used more than the one season and only by one person.
Q. Who was that person?
A. It was Mr. Mootz.

That is all.
By Judge POPE: That is all.
Witness excused.

Mr. CHARLES B. LEWIS, a witness duly called, sworn according to law, was examined and testified as follows, to wit:

Examination by Judge POPE:

Q. What is your name?
A. Charles B. Lewis.
Q. Where do you live?
A. Over at Mesa.
149 Q. What is your business?
A. I am a zanjeiro of the Consolidated canal.
Q. Were you ever in the employment as zanjeiro of the Mesa canal?
A. Yes, sir.
Q. When?
A. From in 1891 to March, 1896.
Q. Where was you at the time the Consolidated canal was constructed down to the division gate?
A. I was along the line of the old Mesa canal.
Q. Was there any objection made to the construction of that canal?
A. I never heard any.

Defendant objects to the question. Objection overruled and defendant excepted.

By Judge POPE:

Q. Do you know the ditch that has been called the old Lewis ditch?
A. Yes, sir.
Q. That is taken out of the Mesa canal how far below the division gate?
A. Some 400 or 500 feet.
Q. Was that ditch used at the time you were employed by the Mesa Canal Company?
A. Yes, sir.
Q. Do you know anything about the Mesa Canal Company consenting or objecting to the check being put in to divert the water into the old Lewis ditch?
A. Yes, sir.
150 Q. What did the company do?

A. They wouldn't allow any check to be put in there.

Q. Why?

A. Because it would back the water up and would injure the canal.

Q. Do you know how many inches that lumber check raised the water in that canal?

A. About 4 inches.

Q. And that wasn't allowed to go any higher than that?

A. No, sir.

Q. Since the Consolidated canal was constructed down to the division gate, do you know of any checks being put in down at the Lewis ditch?

A. Yes, sir.

Q. How much did that raise that water then?

A. Between 2 and 2½ feet.

Q. That is, the first raise?

A. We gradually raised it a little. We didn't raise it much at first.

Q. But kept gradually climbing up?

A. Yes, sir.

Q. Then did you know that they constructed a new lateral ditch called the new Lewis ditch?

A. Yes, sir.

Q. Did they make any increase in the checks of the canal then?

A. Yes, sir.

Q. What was the first act done in that respect?

151 A. They put in a brush and a rock check.

Q. How far below the division gate?

A. Some 60 or 70 feet.

Q. How much did that check raise the water in the canal, or about how much?

A. Some 3½ feet, I judge.

Q. How much was the water fall before they checked the water up against it at the division gate?

A. It was between 3 or 4 or 4 and 5 feet.

Q. How did they reduce it?

A. They backed up the water so that there was no fall there at all.

Q. Still there is a little drop there, isn't there?

A. Yes; a very small one.

Q. How many raises did they make from the floor of the water into the new lateral ditch?

A. They changed it two or three different times.

Q. When did they put in the wooden dam?

A. It was some 5 or 6 weeks ago.

Q. Is that higher or lower than the rock-and-brush dam that they had across there?

A. It is higher.

Q. Where were you when they put that brush-and-rock dam across there?

A. I was there on the ground.

Q. What time of the day was it done?

A. It was in the night-time.

152 Q. Do you know anything about the high-water mark at the Ayers head gate of the old Mesa canal?

A. Yes, sir.

Q. Do you know the stake that is driven in there?

A. Yes, sir.

Q. How is that stake with reference to the high-water mark at that point?

A. At the time it was driven there I think it was a little higher.

Q. You are sure it is high enough?

A. Yes, sir.

Q. And you think it is a little higher?

A. Yes, sir.

That is all.

Cross-examination.

By Judge STREET:

Q. Although the company objected to the check being put in there, in the new Lewis ditch, there was a check put in there?

A. Do you mean during the time the Mesa people had control of it?

Q. Yes, sir.

A. No, sir.

Q. When was it?

A. At the time the Consolidated canal was completed down to the division gate.

Q. How long after it was completed?

A. I don't know.

Q. Did the water run into the Consolidated ditch at that time?

153 A. Yes, sir.

Q. How did it get in there?

A. Through the gate.

Q. Was there any check to force it in?

A. No, sir.

Q. You are interested in having water in the Lewis ditch, are you not?

A. Yes, sir.

Q. And you have from time to time built up your check?

A. Yes, sir.

Q. So as to increase the height of it continually?

A. Yes, sir.

Q. And you also took a part in the making of the rock-and-brush dam for the new Lewis ditch?

A. No, sir.

Q. Were you there when that was being done?

A. Yes, sir.

Q. Were you interested in the new Lewis ditch?

A. No, sir.

Q. Were you in the old Lewis ditch?
A. I suppose I am. I own some stock in there, but as it is abandoned I don't know as I do or not.
Q. How much water does the old Lewis ditch flow?
A. It will carry according to the water in the canal.
Q. But what is the normal capacity of it?
A. It varies from 75 inches to 1,000 inches.
154 Q. And its carrying capacity, then, is 1,000 inches of water?
A. Yes, sir.

That is all.
By Judge POPE: That is all.
Witness excused.

CHARLES C. DANA, Esqr., a witness, being duly called, sworn according to law, and examined on behalf of plaintiff, testified as follows, to wit:

Examination by Judge POPE:

Q. Where do you live, Mr. Dana?
A. I live up at Mesa.
Q. How long have you lived there?
A. Ever since 1879.
Q. What is your business?
A. I have been zanjeiro for the Mesa Canal Company.
Q. During what time have you been a zanjeiro for that company?
A. From about 1883 to 1890.
Q. Then you knew the lateral ditch known as the old Lewis ditch?
A. Yes, sir.
Q. Do you know whether the Mesa Canal Company allowed any check to be put in there to divert the water into their ditch?
A. They did not until after three or four years.
Q. You are a zanjeiro now of the company, are you?
A. Yes, sir.
Q. Did any of the parties interested want to have a check
155 put in there?
A. Yes, sir.
Q. And they couldn't get leave from the company to do it?

Defendant objects to that question as leading and suggestive. Objection sustained.

Q. State whether the parties owning the land under the Lewis lateral ditch, whether they did or did not make application for leave to have a check put in there to divert the water from that ditch.
A. Yes; several times.
Q. What was the action of the company on that subject?
A. We didn't want to allow it on account of the additional ex-

pense in cleaning the ditch, for sediment would settle in the canal above the check?

Q. You can state about putting the checks in the canal since the Consolidated canal was built. Was there or was there not a higher check put in?

A. Yes; there was about a foot check put in and built of rock.

Q. And after that what was done with reference to putting in another check?

A. They put in a rock and a brush check below the new lateral ditch.

Q. When was that put in?

A. That would be difficult to get at. It was either in the afternoon or it went in at night-time.

Q. How much did you raise the water there?

156 A. Some 4 or 5 feet.

Q. Then some month or two ago, what was done in regard to putting in a different check?

A. We took that out and put in a lumber check.

Q. How high is that?

A. That is still higher than the rock check.

That is all.

Cross-examination.

By Judge STREET:

Q. All of the preparations for putting in this rock-and-brush dam was made in the daytime and the work was continued into the night-time?

A. Yes; I went up there some time in the afternoon; they told me to come up there, and I did, and I had charge of the work. I went up there and the teams hadn't arrived, and so I went over to see Mr. Lewis and to find out whether they were going to do it or not, and I met them coming up.

Q. Was the material there when you got there?

A. No, sir.

Q. And you kept to work at it until you got it finished, which took you until into the night?

A. Yes; I went home about one o'clock.

Q. That is the position—you didn't go there in the night-time, but you commenced in the daytime and didn't get through until into the night?

A. Yes, sir; that is it; but we didn't get started until

157 about dark.

Q. Have you any lands under the Lewis ditch?

A. No, sir.

Q. Do you know anything about the operations under the Lewis ditch?

A. Not but very little. My business calls me on the line of the main ditch.

Q. You are the zanjeiro of the main ditch?
A. Yes, sir.

That is all.
By Judge POPE: That is all.
Witness excused.

HIRAM S. PETERSON, Esqr., a witness duly called on behalf of plaintiff, was sworn according to law, examined, and testified as follows, to wit:

Examination by Judge POPE:

Q. Where do you live, Mr. Peterson?
A. I live at Mesa city.
Q. How long have you lived there?
A. I came there first in 1879.
Q. Are you a stockholder in the Mesa canal?
A. Yes, sir.
Q. How long have you been a stockholder in that company?
A. I owned stock soon after I came there, and I sold that and bought other stock about 12 years ago.
158 Q. Do you know the land under the Lewis lateral ditch?
A. Yes, sir.
Q. Do you know anything about the use of the ditch or the putting of checks in there to flow the water from the Mesa — into that ditch?
A. I know that we tried to get the directors to allow us to put checks in the canal, and it was several years, but finally they put in a check of 4 inches.
Q. What was the objection to it?
A. They were afraid that the canal wouldn't stand it, as it was very free soil there.

That is all.

Cross-examination.

By Judge STREET:

Q. We will waive our cross-examination. No questions.
Witness excused.

WILLIAM CHRISTMAN, Esqr., a witness, having been duly called sworn according to law, and examin*ation* on behalf of the plaintiff, testified as follows, to wit:

Examination by Judge POPE:

Q. You may state your name.
A. My name is William Christman.
Q. Do you reside in Mesa?
A. Yes; six miles beyond.
159 Q. Have you ever been a director in the Mesa Canal Company?
A. Yes, sir.

Q. When were you a director in that company?
A. In 1890 and 1891.
Q. Were you one of the directors of that company at the time the Consolidated canal was built down to the division gate?
A. Yes, sir.
Q. Was Mr. W. N. Standage president of the company at that time?
A. Yes.
Q. Did you have any conversation with Mr. Standage about allowing that canal to be built down to the division gate?

Defendant objects to the question. Objection overruled, and defendants except.

A. I was riding by there in a buggy, right past where the dredger was at work, and I was at the Ayers head gate, and we was talking the thing over, and I asked what he was going to do, and he said, I don't know as it is necessary to do anything; this plan of construction will save our cleaning ¾ of a mile of ditch, and, as far as I am concerned, I would rather see the gates down where they intend putting them than to have them up there. That is about all there was to it.
Q. When you were a director, was there anything said by the board in relation to allowing checks to be put in down where the old Lewis ditch was?
A. I don't remember of anything. I don't think I was a director at that time.
160 Q. Did you hear any objection from any stockholder or director at the time the Consolidated was being extended down from that place to the division gate?

Defendant objects to the question. Objection overruled, and defendant excepts to the ruling of the court.

A. No, sir; I have heard of no objection.

That is all.

Cross-examination.

By Judge STREET:

Q. You are located 6 miles above Mesa city?
A. Yes, sir.
Q. And located on the line of the canal?
A. Yes, sir.
Q. Where do you get your water from?
A. I have two different laterals. One is 3 miles from the head, and the other one is 3½ miles from the head. It is on section 31, in the northeast quarter.
Q. Do you put a check in there?
A. Yes, sir.
Q. How much of a check is that?
A. Five feet.
Q. What sort of a check have you there?

A. It is a lumber check.
Q. And that raises the water five feet?
A. In low times of the water it does.
Q. This is the permanent lumber check?
161 A. Yes, sir.
Q. How far is that above the division gates?
A. It is perhaps above 4 miles.
Q. Is there any other check between your check and the division gates that you know of?
A. Not at the present time, but there has been.
Q. Where was it?
A. It is probably ½ to ¾ of a mile above the division gates.
Q. Do you mean the old Ayers head gate?
A. Yes; it is perhaps a little below.
Q. Is it below, so far as the junction of the Consolidated and the old Mesa canal are concerned?
A. I think it is about at the junction of the two canals.
Q. What is the purpose of that check?
A. It is to raise the water for the land on the west.
Q. Who put that check in there?
A. I suppose the Consolidated Canal Company did.
Q. And to irrigate whose lands?
A. I suppose they belong to Dr. Chandler.
Q. How much of a check is that?
A. I don't know, but I have seen the check in there.
Q. Do you know the check that is in the Mesa canal below the division gate?
A. I do not.

That is all.

By Judge POPE: That is all.

162 Witness excused.

A. J. CHANDLER, Esqr., a witness produced, sworn according to law, and examined on behalf of the plaintiff, testified as follows, to wit:

Examination by Judge POPE:

Q. Your residence, Dr. Chandler, is at Mesa, in this county?
A. Yes, sir.
Q. You are the Dr. Chandler that is mentioned in this evidence?
A. Yes, sir.
Q. And you have been connected with The Consolidated Canal Company, plaintiff in this suit, from its inception to the present time?
A. Yes, sir.
Q. Where were you at the time the canal was constructed for the mile, say, extending from the division gate up the canal; were you here present?
A. I was here a part of the time while the construction was going on.

Q. And you has a knowledge of the construction of it at that time?

A. Yes, sir.

Q. You had a contract with the Mesa Canal people in relation to the delivery of the water?

A. Yes, sir.

Q. Your original contract provided for the delivery of the
163 water to the Mesa Canal Company at or near the place called the Ayers head gate?

A. Yes, sir.

Q. Why did you construct the canal to the place called the division gate?

A. We came on down a ½ mile after we made the permanent survey, because we could cut out the canal in better shape.

Q. Did you consult with the president of the Mesa Canal Company about that?

A. Yes, sir.

Q. Who was he at that time?

A. He was Mr. William Standage.

Q. What did he say about it?

Defendants make the same objection as before.

Objection overruled and exception taken.

A. He said that he could see no objection to it, and afterwards he spoke of talking with the board and stockholders about it.

By Judge STREET: Do you know that he spoke to the board and stockholders about it?

A. He told me so.

Defendant objects to the question. Objection sustained.

By Judge POPE:

Q. You had another talk with him afterwards, did you?

A. Yes, sir.

Q. Leaving out about what he said about anybody else, state whether he made any objections.

164 A. No, sir; he said that it would save them from keeping up ½ mile of the ditch and cleaning it, and it would really be a benefit to them.

Q. Did you talk to any other directors about it?

A. Yes, sir.

Q. Did they object to it?

A. No, sir.

Defendants object to the question for the same reason.

By Judge STREET: Let us see what was said and who they are.

Objection overruled. Defendant excepts to the ruling of the court.

By Judge POPE:

Q. State whether anybody, a director or stockholder of the Mesa canal, made any objection, so far as you know, to the canal being terminated at the division gate.

A. Not at that time.

Q. Did anybody make any objection until after the canal and head gates were constructed?

A. No, sir; and not for a long while after.

Q. The contract between the Consolidated Canal Company and the Mesa Canal Company provides for the delivering of the water. Now, at what point has the water been delivered?

A. At the division gate.

Q. And it has been accepted there by the canal company all of this time?

A. Yes; the majority part of the water.

165 Q. Was there any payment connected with the delivery of the water there?

A. Yes, sir.

Q. State whether or not they have made the payments.

A. Yes, sir.

Q. In constructing the Consolidated canal, did you take the same grade that was used by the old Mesa canal or not?

A. No, sir; they had a different grade.

Q. What is the grade of the Consolidated canal for a few miles above the division gate?

A. It is 2 feet to the mile.

Q. And above that it is how much?

A. Above the Ayers head gate it is 3 feet to the mile.

Q. Down to the Ayers gates it is three feet to the mile and from there to the division gates it is two feet to the mile, is it?

A. Yes, sir.

Q. In constructing the Consolidated canal upon this grade, what was the effect with regard to creating a waterfall at the division gate?

A. It raises the grade at the division gate.

Q. How much is your grade there above the old Mesa grade?

A. Five feet.

Q. Where was the drop in the water?

A. At the division gate.

Q. I mean the particular point where it dropped. Was it inside or outside?

166 A. It was inside.

Q. You put that structure up, did you?

A. Yes, sir.

Q. How many feet is that division-gate structure in distance?

A. I would say that it is 16 to 18 feet.

Q. State whether there is a floor in that structure.

A. There is.

Q. And upon it the water drops?

A. Yes, sir.

Q. Well, the place where you put in your wheel, then, is so as to have the water strike it between the gate part and the floor, where the water drops?

A. Yes, sir.

Q. And that is inside of the structure?

A. Yes, sir.

Q. When did you first have in view the purpose of utilizing that fall in developing mechanical power?

Defendants object to the question.

By Judge POPE:

Q. In the matter of planning the canal, what was the first step taken?

A. It was to run levels and to find out our grades.

Q. When did you fix upon the grade that you afterwards put into effect in your canal?

A. I think it was in 1890.

Q. Who was your first engineer?

167 A. The first engineer that we had was Mr. Trott.

Q. I mean when you commenced working towards the construction of the canal.

A. It was Mr. McGinnus, and then after him we had Mr. Coad.

By the COURT: The noon hour having arrived, we will adjourn till 1.30 p. m.

Witness was excused and court adjourned.

Afternoon session.

Court being open, his honor being upon the bench, parties to this cause being all present and represented by their respective counsel, this cause was called and proceedings were had as follows, to wit:

Dr. A. J. CHANDLER, resuming the stand, testified on behalf of plaintiff as follows, to wit:

Examination by Judge POPE:

Q. Before commencing the actual work of dredging and digging the canal what did you do with regard to adopting the grade for that canal?

A. We had our lines run and a survey made.

Q. What grade did you adopt for your canal?

A. I think we figured on the same grade as we have now—that is, 3 feet to the mile down to the Ayers head gate, and then we changed it to 2 feet to the mile from there on to the division gates.

Q. Why did you adopt the grade of two feet to the mile

168 from there on?

A. That gave us a sufficient grade for the amount of water we wanted to run and permitted us to get it up higher at the division gate.

Q. For what purpose was that?

A. We wanted the water higher in order to cover this portion of the country out in here and to the southeast. The fall of the water was created in the construction of the canal.

Q. Where did that water go to the southeast of the division gate? Was that for irrigation purposes?

A. Yes, sir.

Q. What was the purposes with regard to the waterfall?
A. It was to utilize it for power purposes.
Q. How long were you in constructing the canal from the point opposite to the Ayers head gate down to the division gate and in constructing the division gates?
A. I think we were in active operation for a month or six weeks.
Q. Did Mr. Newell assist in any of the work?
A. Yes, sir.
Q. Did Mr. Standage, the president of the Mesa Canal Company?
A. Yes; he was interested in clearing off the lands here.
Q. State whether or not, in adopting your two-foot grade, you incurred any larger expense than you would otherwise have incurred in the construction of that canal.
A. Yes, sir; very much larger.

Q. And in doing the work from Ayers' head gate down to
169 the division gate you did more excavation to make that grade?

A. Yes, sir.
Q. How much more in money did that work cost you than——

Defendants object to the question.
By Mr. POPE: We want to show to the court that we have invested a large amount of money in creating this grade.
Objection is overruled by the court, and defendant- except to the ruling of the court.

A. From $1,500 to $2,000 more to construct it.
Q. How much did the head gates cost you?
A. Several thousand dollars.

Defendants object to the question as immaterial for the reason that the head gate is a matter of cost in construction whereever it was put in.
By Judge POPE: That is so, but we have spent that money at that place.

Defendant objects to the question. Objection overruled, and defendant excepted.

A. It would cost some 4,000 or $5,000, I suppose.
Q. During the time this construction was going on how many of the stockholders in the Mesa Canal Company were present at different times?
A. I saw a great many of them there at different times.
Q. Did you hear any of them talk while there?
A. Yes.

Q. Did any of them indicate any sort of an objection to
170 the work going on?

A. I never heard of it if they did.

Defendant objects to the testimony. Objection overruled, and exception taken.

Q. When did you first hear of any objection on the part of anybody?

A. It was years after we commenced to deliver the water; I suppose it was 2 or 3 years after.

Q. You had been delivering their water to them all of that time at the division gate?

A. Yes, sir.

Q. State whether any of the men that objected two or three years after the work had been done—whether they were stockholders at the time you did the work—were they old stockholders or new ones?

A. Some were old and some were new, but the greatest objection was from the new ones.

Q. Do you know the extent of the waterfall that you had at the division gate before it was interrupted?

A. Yes, sir.

Q. How much was it?

A. It was five feet fall.

Q. Approximately, how much horse-power is that?

A. The average horse-power of that fall, depending upon the amount of water in the canal, is about 40-horse power.

Q. It is more when the water is up and less when it is down?

171 A. Yes, sir.

Q. When did you commence utilizing that power for mechanical purposes?

A. In April, 1895.

Q. Is that the time you put the wheel and crusher in?

A. Yes, sir.

Q. Was that all of the use you intended to make of that water power?

Defendant objects to the question. We object to what his intention was except as demonstrated by his act.

Objection sustained.

Q. Do you know the value of a water power of that character?

A. I have investigated it a great deal and know something of it.

Q. What kind of machinery is that capable of moving?

A. A large amount of machinery, 40-horse power will handle.

Q. Is it enough to operate a merchant mill?

A. Yes, sir.

Q. You have seen the place called the high-water mark at the Ayers head gate?

A. I have seen it; yes.

Q. Do you know the post that the witnesses have testified to as set by the Mesa Canal Company's committee?

A. I don't know especially about it.

Q. Do you know about the real difference in the grades of the two canals opposite the Ayers head gate?

A. Yes, sir.

172 Q. How much is it?

A. It is about 5 feet.

Q. Something has been said in the testimony of some of the witnesses about there having been some water run through the old

Mesa canal by way of the Ayers head gate and through your division gate?

A. Yes, sir.

Q. I wish you would state exactly what was done in that respect.

A. When we were constructing the division gate the water was necessarily out of the Mesa canal, and we expected to get the dredger through this thorough cut to make connection, but we failed and didn't get quite through, and the Mesa people wanted stock water previous to that time, so we put on men and tools and teams and built up this bank to the old Mesa in order to enable us to give them stock water.

Q. And did you run water through there then?

A. Yes, sir.

Q. How much did you run?

A. Well, it was only for a short time until we could make connections. We fell a little short of what we thought we would be able to do.

Q. Is it shown on this cross-section where you raised the banks?

A. Yes, sir.

Q. And it was necessary to build up this bank to give them that water?

A. Yes.

173 Q. Some evidence has been given about your having at one time put a check in the Consolidated canal at some point above the division gate. Give the history of that.

A. (Indicating upon the map.) At this point?

Q. Yes, sir.

A. We had a check right near the junction of the Consolidated canal with the old Mesa—below the old Ayers head gate.

Q. When was that?

A. That was a little over a year ago.

Q. Tell the court about it.

A. There was a check that was only put in temporarily—that is the kind of a check—so that we could check the water for a short time, and then remove it.

Q. What was the purpose of that check?

A. It was to irrigate a little land in here.

Q. To put water onto the land to the west here (indicating)?

A. Yes, sir.

Q. State whether or not at that time there was little water in the canal.

A. There was only a little water in the canal; that was the reason of it.

Q. When the canal is running full, is it necessary to have that check?

A. No, sir.

Q. Would you have to put in the check at high-water times?

A. No, sir.

174 Defendant objects to the question as improper.

Witness continuing: It wouldn't have been a necessity to have

done it if the water was high; it would have had the effect of endangering the water of running over the banks.

Q. But when the water is low there is no danger?

A. No, sir.

Q. You say that was for the purpose of irrigating this land to the west?

A. Yes, sir.

Q. For how long a time was that?

A. Just two or three days.

Q. What became of the check?

A. It was removed.

Q. And has not been there since?

A. No, sir; when we got through irrigating we took it out.

Q. State what action the Mesa Canal Company took in regard to interfering with the water power at the division gate.

A. They put a brush and rock dam below our water power and backed the water up against the division gate.

Q. That was put in on about what level?

A. On a level of the east branch.

Q. And that comes out above the drop?

A. Yes; and I think it is on about the same grade.

Q. After putting that rock and brush dam in there, what effect did that have upon the water power?

A. It destroyed it while we were using it.

175 Q. State what they have done with regard to increasing the construction.

A. They have built it up by adding to it, and then finally they put in a lumber check a few months ago.

Q. How is that as compared in height with the rock and brush dam?

A. It appears to be higher.

Q. Then the effect of the obstruction in the flow of the water in the canal—the effect upon that water power—state that in general terms.

A. The effect is to destroy the water power.

Q. That is all.

Cross-examination.

By Judge STREET:

Q. What time did you commence to construct the Consolidated canal, Doctor?

A. I think we commenced the construction of it some time in February or March, 1891. It was somewhere along there, after the flood.

Q. When did you finish it?

A. We have not finished it yet.

Q. When did you finish it down to the division gates?

A. We finished it some time in December, 1891—that is, we constructed it down to the division gates, but we have not finished it yet.

Q. About what time did you get to the division gates on section 14?

176 A. It was some time in December, 1891.

Q. So as to deliver water substantially as it has been delivered ever since?

A. Yes, sir.

Q. You had a contract with the Mesa Canal Company under date of 1889, did you not?

A. Yes, sir.

Q. Was there anything done under that contract?

A. I think not.

Q. Was any surveying done under it?

A. Yes; I had surveying done after that, and I may have had some previous to that.

Q. After the contract of 1889 was signed and before the contract of 1891, what was done towards furthering the construction of the Consolidated canal?

A. I don't think of anything except perhaps some surveys.

Q. What was the extent of the surveys all along the whole line of the Consolidated canal as now constructed down to the division gates?

A. I presume we did have surveys run on along down through there, but I don't know whether it was to the division gates or not.

Q. Who made the survey from the river down to the division gates?

A. Mr. McGinnus.

Q. When did he go into your employ?

A. I don't just remember when he did start in.

By the COURT:

177 Q. What is the date of this contract?

(A VOICE:) January 10th, 1891.

By Judge STREET:

Q. You say there was nothing done under the old contract unless it was the survey?

A. I think that was all; and those surveys were not completed at that time.

Q. Then, after the contract of 1889 was signed, down to the time of the contract of 1891 being signed, the Mesa Canal people received their water as they formerly did?

A. Yes, sir.

Q. Through their old head at the river?

A. Yes, sir.

Q. And you exercised no dominion over it at all?

A. No, sir.

Q. And did not up until after the contract of 1891 was signed?

A. That is right.

Q. During that time do you know whether there was any irrigating of the lands lying west of the Mesa canal through the Ayers ditch?

A. I never saw any.

Q. Do you know of there being any irrigation through that ditch before you changed the contract?

A. I never heard of any, only in proving up on land.

Q. The Ayers ditch is yet in plain view, is it not?

A. Yes, sir.

178 Q. You knew of the purposes of that ditch at the time you signed the contract?

A. I knew that was supposed to be the purposes of it.

Q. The land to the west of the canal—the old Mesa canal—and down along the line of the Ayers ditch, the elevation of that is higher than the canal in many points, is it not?

A. It is higher than the bottom of the canal.

Q. Yes.

A. Yes; but I don't know whether the lands of Ayers is higher or not.

Q. What section do you call the Ayers land?

A. It is the half of section 15.

Q. When you put in the check at the junction of the old Mesa and the Consolidated canal, what land did you irrigate?

A. We irrigated a part of section 11.

Q. What part of section eleven?

A. Just in here (indicating upon the map). It is a portion of the southwest quarter.

Q. How much of it did you irrigate?

A. I think we irrigated about 80 acres.

Q. And you did that in a time of low water?

A. Yes; moderately low water.

Q. How much water were the Mesa Canal people receiving at that time?

A. I don't know.

Q. Were they receiving any?

179 A. Yes.

Q. Were they receiving as much as 7,000 inches of water?

A. I think they were a part of the time, and a part of the time they were not.

Q. How much of the time were they receiving that much?

A. I couldn't tell you.

Q. Did you make any investigation to know whether they were receiving that amount when you were putting in that check?

A. I did not investigate it.

Q. That check has been in there several times, has it not?

A. Yes, sir.

Q. And always on account of low water in the river?

A. It was always when our canal was not up to the full capacity.

Q. And at times when the Mesa Canal people were receiving their 7,000 inches of water?

A. I presume so.

Q. Do you know?

A. I do not; I cannot swear positively, but I think so.

Q. Then you didn't have a care to find out whether they were

receiving their 7,000 inches of water before you took that water out?

A. I might have had the care.

Q. Did you exercise it?

A. I think I did.

Q. Was that land that you irrigated to the southwest much higher than the level of the Consolidated canal?

180 A. Portions of it were about this corner—that is, the southeast corner of the southwest quarter—because our canal comes down some distance from that.

Q. Your contract called for the operation of the canal—the construction and operation of the canal—from the Ayers head gate to the river, didn't it?

A. Yes, sir.

Q. And you have never had any contract with the Mesa Canal people about any other portion of the canal, have you?

A. Not a contract signed up.

Q. That contract gives you the right to build that portion of the canal above the Ayers head gate?

A. Yes, sir.

Q. And you were to have a contract of that portion, and deliver them their water at the Ayers head gate?

A. Yes; according to contract.

Q. And the building of the canal through a portion of this country around the Ayers head gate was a question of expediency with you?

A. Yes, sir. We could get a better junction by constructing the canal in that manner.

Q. And the junction of the Consolidated and the old Mesa canal is about how far south of the Ayers head gate?

A. I don't know how far; it is but a short distance.

Q. It is 200 or 300 feet, isn't it?

A. Yes, sir; I think it is. I don't know exactly.

181 Q. When the canal was being built around the Ayers head gate and the old portion of that ditch was abandoned that was well known also to the directory of the Mesa Canal Company?

A. Yes, sir.

Q. Mr. Standage was president and he knew about it?

A. Yes, sir.

Q. And that part of the construction was talked of between him and you?

A. Yes, sir; it may have been. I don't think there was much question about its practicability.

Q. When you were building around there, was there anything at all said as to where the division gate should be placed?

A. Yes, sir; we talked of it some time before we got down there.

Q. Where did you talk that it should be placed?

A. Down here where we have it.

Q. Who was it talked by?

A. Between Standage and myself, Mr. Newell and Mr. Christman.

Q. Who else did you mention it to?

A. Oh, to a great many of the stockholders.
Q. Then it was that kind of a consent that you obtained?
A. Yes; we talked about it.
Q. Did you ever meet with the board of directors in a meeting of the board of the Mesa Canal Company and talk that matter over with them and get their written consent?
A. I don't think we did up to that time.

Q. But at the time you took the contract you were cautious
182 enough to get the vote of the stockholders of the company and to have them enter into that agreement?

A. Yes, sir.
Q. You got a vote of the stockholders in order to get the directors to enter into this agreement?
A. I have; yes, sir.
Q. The purposes of building this canal was to bring the lands lying under it into subjection for irrigation and agricultural purposes, was it not?
A. That was one of the purposes.
Q. Was there any other purpose expressed in the contract?

Plaintiff objects to the question. That can be determined by the contract itself.

By Judge STREET:

Q. That is true, but do you now think of any other?
A. I don't know that I do.
Q. There is nothing that you have expressed in the contract about any water power, is there?

Plaintiff objects to the question as wholly immaterial.
Objection sustained, the court remarking: The contract speaks for itself. Defendant excepts to the ruling of the court.
By Judge STREET: Look at that (handing witness the contract in evidence) and see if that is the contract that you and the Mesa Canal Company entered into.
A. Yes; that is the old contract.

Q. You entered into that contract?
183 A. Yes, sir.

Q. That is the first one that was entered into?
A. No, sir; think not. I think there was another contract.
Q. Do you know the date of it, if there was another?
A. I don't remember it.
Q. We will ask to have this filed as an exhibit, and will offer the same in evidence in the case.

There being no objection, the same was duly admitted in evidence and identified as Defendant's Exhibit 1, copy of which is hereto annexed so identified.

Q. You say that it was two or three years after the division gates were in before you heard any complaint?
A. Yes, sir.
Q. Did the directors of the Mesa Canal Company ask you to

vacate that portion of their canal between the division gate and the Ayers head gate?

A. Yes, sir.

Q. When was that?

A. I don't remember the exact date; I think it was some time in 1894.

Q. Did they do it in writing?

A. Yes, sir.

Q. Look at that and see if you recognize that as a copy of that notice?

A. I think that is a copy of it.

Q. Is that signed by Mr. Standage as president?

A. Yes, sir.

184 Q. He is the same Standage that was present and saw you digging the ditch to the present head gate?

A. Yes, sir; he is the same Standage.

Defendants offer this notice in evidence in this case.

(There being no objection to the introduction of the notice, same was duly admitted in evidence and marked and filed as Defendant's Exhibit 2, a copy whereof is hereto annexed so identified.)

Q. About this fall and power that you speak of having here, is that a 5-foot fall?

A. Yes, sir; it is approximately that.

Q. That is all the power that you could possibly obtain there under the present structure?

A. Yes, sir; I suppose it is all.

Q. That power plant that you have put in there is over and on the Mesa canal, is it not?

A. I don't know as to that.

Q. It is below the division gate, is it not?

A. No, sir.

Q. Is it above the division gate?

A. No, sir; it is not above the division gate.

Q. Then where is it?

A. It is located within the structure of the division gate.

Q. It is within the framework and below the gates?

A. Yes, sir.

Q. What sort of a machine or machinery is that?

185 A. It is a water wheel and a barley-crusher.

Q. How large an one is it and what is it made of?

A. It is made of wood.

Q. How large is it?

A. I don't know how large it was.

Q. How was it hung?

A. It has bearings on either side and the water strikes on the paddles of the wheels and causes it to turn around.

Q. What class of framework is it—temporary?

A. No; it is good as long as it lasts.

Q. How long would it last?

A. It is a good wheel for practical purposes.

Q. Was it ever used for practical purposes?
A. Yes, sir.
Q. How much barley did you grind with it?
A. I couldn't tell you.
Q. How many times did you grind barley in it?
A. A great many times.
Q. And on a great many different days?
A. Yes, sir.
Q. How much would you grind in it?
A. It varied according to our use for barley.
Q. Can you give us any idea how much grain that mill ground out?
A. I couldn't tell you.
Q. You don't know whether it was one sack or one thousand sacks?
A. I don't know. I know it was more than one sack. I
186 don't know whether it was one thousand sacks or not.
Q. Do you think it was as many as 500 sacks?
A. I don't know how much it was.
Q. Were you there at any time when it was grinding?
A. Yes, sir.
Q. And superintending it?
A. No, sir.
Q. Who did the grinding for you?
A. The man at the office—Smith had charge of it.
Q. Did he do all of the grinding?
A. No, sir; we was using barley and also selling barley, and when they wanted to have it crushed a man would send up for a load of barley and we would crush it and deliver it to him.
Q. How soon after you put it in did you commence to grind with it?
A. I don't know, but it was not very long.
Q. Was it a few days or was it 2 or 3 weeks?
A. It may have been 2 or 3 weeks.
Q. And it may have been a month before it was used?
A. I don't know just how long it was.
Q. Is there anybody here at all that can tell us how much was done with that mill? I don't care to ask you the question if you don't know anything about it.
A. I am telling you just what I know and no more.
I don't think there is anybody here that can give you the exact figures. If I had the book-keeper here I might be able to do so.
He keeps the record of the grain and where it goes and how
187 much is used, etc.
Q. But you haven't the date here, so as to be able to tell it yourself?
A. No, sir.
Q. And you have no knowledge of it here?
A. No, sir; not an exact knowledge.
Q. With what water were you running that mill?
A. With the water that we turned to the Mesa Canal Company.

Q. Was that after you had turned it to the Mesa Canal Company?

A. Well, I suppose it was used while in the act of going to them; it was on the way to them.

Q. What was the stage of the water in the canal at the time you were using that barley-crusher?

A. We used it at different stages of the water.

Q. Can you give us any knowledge of that?

A. No, sir; nothing exact, for the water was varying, and when there was a change I couldn't tell you exactly.

Q. How long did you use it before the water was backed up on you so that you couldn't use it.

A. I think it was close on to a year, but perhaps not quite a year.

Q. Was there any objections made by the canal company to your putting that in and operating it?

A. There was after I got it in.

Q. How soon after you got it in?

A. Very quickly after it.

188 Q. It was right away, wasn't it?

A. Yes; it was very soon after we put it in that they objected to it.

Q. And they formally protested and objected in writing, and asked you to take it out, didn't they?

A. They asked me to take it out, I think. I don't know that they did ask me to take it out, but I know that they objected to it.

Q. And the board of directors objected to it and the officers of the corporation objected to it. I don't mean that Tom, Dick, and Harry on the street objected to it, and final action was taken?

A. I don't remember that they did. They may have taken final action on it.

Q. And didn't they inform you of that action?

A. I don't think they did.

Q. And you went right along grinding?

A. Yes, sir.

Q. And paid no attention to that?

A. Yes, sir.

Q. Was there any check in down at the Lewis ditch at that time?

A. I believe there was a small check there.

Q. And that check was for the purpose of throwing the water into the Lewis ditch?

A. Yes, sir.

Q. From the division gate you have a lateral running east and south for some considerable distance, have you not?

A. Yes, sir; an extension.

189 Q. How far does that extend?

A. It runs about 18 miles.

Q. And covers a large area of land?

A. Yes, sir.

Q. And the new Lewis ditch runs parallel to that, does it not, for some distance?

A. I don't think they call it the Lewis ditch.

Q. Well, the new ditch, then?

A. Yes; there is a ditch running parallel with it for some distance.

Q. How far does it parallel yours?

A. (Pointing upon the map.) I think it runs down to here. I think there was a ditch along here, but whether they have taken that in and called it the same ditch or not, I don't know.

Q. Then, prior to the construction of the east Mesa canal, if that is what it is called, there was a ditch across a portion of section 19?

A. Yes, sir.

Q. And that ditch that was across a portion of section 19 got its water where?

A. From our east branch.

Q. (Pointing to the map.) Did that ditch cross section 19?

A. Which one do you refer to?

Q. The one that was contracted out of the new Lewis ditch.

A. I suppose that is the Wallace ditch.

Q. Did you ever furnish Wallace water from that east branch?

A. Yes, sir.

190 Q. How much and how often did you furnish him water?

A. That is hard to say.

Q. And the new east ditch runs into that ditch?

A. Yes, it connects with it.

Q. So that it runs into the ditch that Wallace built and was irrigated by?

A. Yes, sir.

Q. So that he could irrigate his land by Mesa Canal water?

A. Yes, if he run it from that ditch.

Q. How much land will the new Mesa ditch irrigate?

A. I couldn't tell you.

Q. Do you know how many sections or ¼ sections?

A. I couldn't tell you that.

Q. Do you know anything about the lands that was irrigated by the Lewis ditch?

A. I know something of them.

Q. Do you know who it was that was irrigating that land?

A. I know some of them; some of the parties.

Q. What parties are irrigating or can irrigate by means of this new Lewis ditch different from the parties who are irrigating by the old Lewis ditch?

A. I don't know them all.

Q. Do you know any of them?

A. I think I do.

Q. Who are they?

191 A. Those that are irrigating now?

Q. Yes; that were under the old Lewis ditch.

A. I think Dr. Wilbur is irrigating a piece of land there, for one.

Q. Do you think of anybody else?

A. I think Mr. Lewis is irrigating on here (pointing to the map).

Q. And they are irrigating lands that couldn't be irrigated out of the other ditch, are they?

A. Well, Dr. Wilbur is the only one that I know of positively.

Q. Didn't you offer an inducement to Mr. Wallace to come down and buy lands in there, saying to him that you could deliver him water immediately from the head gate on to his land or take it into the ditch that would run into his land?

Plaintiff objects to the question as irrelevant and immaterial. Objection overruled and exception taken.

A. I didn't make him any special inducement.

Q. Did you tell him you would let him have water from your gate?

A. I think at the time we had the canal constructed from here, and naturally I would have told him so if he wanted water on his land, for that was the purpose of our building the canal.

Q. Didn't you tell him that you would let him have it right here below the division gate?

A. No, sir.

Q. And wasn't the real purpose of this lawsuit to prevent these people from running the water in their new ditch? Is not that the real object and purpose of this lawsuit?

A. So far as they interfere with my power and my rights, it is.

192 Q. Is it not a matter of fact that you put that power plant in there, not for any purpose of utilizing the power or for practical purposes, but to simply make a showing of power, so that no one could build any ditches here (indicating upon the map) and take water into them without interfering with it?

A. No, sir.

Q. That water drop was not built for that purpose?

A No, sir.

Q. I want to know if you didn't put in that little make-shift of machinery there, so that if anybody was to dig a ditch and make a check there they would necessarily have to interfere with your little piece of machinery, and that that would be an apology for a lawsuit?

A. I may have wanted it in there to maintain my rights.

Q. And it was put in there more for the purpose of maintaining your rights than for the purpose of any practical utility?

A. It was for both purposes. It was practicable and it was to maintain my rights there also.

That is all.'

Redirect examination.

By Judge POPE:

Q. Going back to the question that he asked you, how much water the Mesa canal was getting when you put in the check and took water to irrigate lands near the head gate, I want to ask you

what authority you had at that time to use any Mesa water for any purpose.

193 A. I had a right to, because I was interested in the Mesa Canal Company.

Q. You had stock in that company that entitled you to use it?

A. Yes, sir.

Q. And you took that which you were entitled to to irrigate your lands?

A. Yes, sir.

Recross-examination.

By Judge STREET:

Q. Then you were using Mesa Canal Company water when you put that check in there?

A. Yes, sir.

Q. Were you using Consolidated Canal or Mesa Canal water?

A. A part of the time I was using Consolidated Canal water and sometimes I was using Mesa Canal water.

Q. Which times did you use Consolidated Canal water and which times did you use Mesa Canal water?

A. I couldn't tell you that.

Q. Then you were not using that water under the authority that you had of using the Consolidated Canal water, but it was by virtue of your controlling the ditch above the division gates?

A. Yes; I drew Mesa water above the division gate.

Q. I am asking whether you did that by virtue of your authority or power or control of the water above the division gate or whether you did it as a stockholder.

A. I did it by virtue of my authority over the water.

Q. Then you answer that you were using Mesa water out
194 of the Consolidated canal by virtue of your being a stockholder in the Mesa Canal Company?

A. By virtue of my being a stockholder and by virtue of my contract with the Mesa Canal people.

Q. Then you claim the right to take out of the Consolidated canal your portion of the Mesa water for your own individual use?

A. If I am using it above, I do.

Q. And if another stockholder have the same right in the Mesa canal, you would do it for him?

A. I do it for other stockholders now.

Q. Has any other stockholder the same right as that?

A. No, sir.

Q. How have you any right, then?

A. By virtue of our contract. There are people to take out water above the division gate and we have apportioned them the water by virtue of our authority under the contract.

Q. That is, parties having lands that lie above the Mesa canal?

A. Yes; above the Ayers head gate.

Q. How was that done above the Ayers head and the division gate?

A. There is nothing in the contract about that.

Q. Then the land that lies below the Ayers head gate would be irrigated by water from the Mesa canal?

A. Not necessarily.

Q. Then it would be only by the grace of the Consolidated Canal Company that they let them have any water? Would the Mesa Canal people have any right to use water to irrigate lands
195 below Ayers' head gate and between that and the division gate?

A. Yes.

Q. I will state the question again: Your contract calls for the control of the ditch above the Ayers head gate. You, as a matter of fact, dug down on section 14?

A. Yes.

Q. Then there is a distance of ½ mile between the lands lying there (indicating) and in here?

A. Yes.

Q. Now, would the lands lying between the Ayers head gate and the division gate on section 14 be irrigated by water belonging to the Mesa Canal Company or by water belonging to the Consolidated Canal Company?

A. It could be irrigated by either.

Q. If any of the Mesa Canal owners of water were ow-ing land above the division gate and below the Ayers head gate, would they have a right to take their water out of the Consolidated canal—the Mesa water—by virtue of their owning water in the Mesa canal? They wouldn't have a right to take it out there, would they?

A. Yes, sir.

Q. Then they would have to irrigate by Consolidated Canal water?

A. No, sir.

Q. Then they couldn't get water only by the consent of the Consolidated Canal Company?

A. They could apply to the Consolidated Canal Company the same as we are doing now. The Mesa water is running out
196 here (indicating upon the map) at the present time by order of the Mesa Canal Company. They give us an order and we turn it out into the lateral canal there.

Q. Now, the Mesa Canal people don't claim any absolute right to that, do they?

A. No, sir.

Q. But they do claim an absolute right to the water below the division gate?

A. Yes; I believe they do.

Q. They wouldn't have any right to the Mesa water above the division gate?

A. I think they have a right to come to me and have me turn out water to them above the division gate—that is, I think so.

That is all.

By Judge POPE: That is all.
Witness excused.

The witness S. DAVIDSON, Esqr., being recalled on behalf of the plaintiff, resumed the stand, and upon examination testified as follows, to wit:

Examination by Judge POPE:

Q. When you were on the stand this morning I put this question to you, according to the reporter's notes: I meant to ask you what was the effect of a stopping of the flow by a check?

A. It would check the flow of the water in the canal, but it would increase the velocity at the check.

Q. That is, at the particular place where it flowed over?

197 A. Yes; it would increase it.

Q. But what would be the effect of that on the canal?

A. It would decrease the flow and deepen the water.

That is all.
Witness excused.

By Judge POPE: I want to state to the court that the last legislature passed a law respecting the use of water for water-power purposes; and we want to introduce in evidence a certified copy of the location notice which was made in 1893.

By Judge STREET: And which defendant objects to for the reason that the law was passed after the contract was entered into, and that if rights was obtained under that law it was obtained after the contract was entered into, and defendants are in nowise bound by what rights he may have obtained under that for mechanical appliances.

By the COURT: If a right has been —, so far as this case has been concerned, the appropriation of water would be a matter immaterial, but you can introduce it.

Defendants except to the ruling of the court. (Same, being duly admitted, was thereupon marked as Plaintiff's Exhibits B and C, heretofore identified on page 9 of this transcript, copies of which are hereto attached so identified—Plaintiff's Exhibits B and C.)

Plaintiff rests.

198 By the COURT: You may adjourn court at this hour until Monday morning at 9 o'clock. Court thereupon adjourned.

MONDAY A. M., *December 14th*, 1896.

Court being open, his honor A. C. Baker, judge, upon the bench, parties to this cause all present and represented by their respective counsel, the following proceedings were had:

Defense.

Mr. F. P. TROTT, a witness called, duly sworn according to law, and examined on behalf of the defendant, testified as follows, to wit:

Examination conducted by Judge STREET:

Q. You may state your full name to the court.

A. My name is Frank P. Trott.

Q. Where do you live and what is your business?

A. I live here in Phœnix, Arizona, and my profession is that of a civil engineer, and I am county surveyor of this county.

Q. Do you know the Consolidated Canal Company?

A. I don't know the company itself, but I know some of the parties claiming to have formed the company, and I know the canal.

Q. Do you know the head of the canal and its general line down to section 14?

A. I am familiar with it; yes, sir.

Q. You have made some surveys of that canal and of the ground adjacent to it, have you?

A. At certain portions of it; yes, but not from the head to
199 the point you indicate in all places.

Q. You are the water commissioner for the division of the waters to the canals in this valley, are you not?

A. I am under the jurisdiction and direction of the court.

Q. Have you made any measurements or surveys or taken any observations of the canal recently?

A. I have.

Q. Where were they taken?

A. Out at the point just above where the Ayers ditch left the old Mesa canal down to the division gates of the Consolidated canal, and there is a check some hundred feet below that, recently put in by the Mesa Canal Company, as I have been informed.

Q. You speak of a check in the Mesa canal below the division gate?

A. Yes; in the Mesa canal.

Q. Have you a knowledge of the Consolidated canal sufficient to state whether the head of the canal at the river is now of a less or greater elevation than the head of the old Mesa canal?

A. I have made no measurements of it and have no positive knowledge as to the difference in the elevation at the present time; I can only give you the information as the result of my observations.

Q. What is your opinion as the result of your observations?

A. It is that the head is some 2 or 3 feet lower than the old head of the Mesa canal.

Q. Do you know the grade of the canal from the head
200 down to the Ayers gate?

A. No, sir.

Q. Nor from the Ayers gate down to the division gate?

A. No, sir; I never made a consecutive line from the head down to the Ayers gate, nor from the Ayers gate to the division gate.

Q. When did you make the measurements on the canal from the Ayers head to the division gate below?

A. As to the measurements of distance and elevation, it was on June 11th, 1896.

Q. What is the distance from the Ayers head gate to the division gate?

A. If you will permit me to get myself straightened as I would like to be in giving this testimony I will state to the directors of the Mesa Canal Company, who desired me to make these measurements and give them the result of the levels and distances, that I declined to do so on the ground that I was the water commissioner, and it might result in something that would be either subject to employment or disposed to show favoritism in one canal as against the interests of the other; and then they made a demand upon me as the county surveyor to come and do the work. I thought that simply being the county surveyor wasn't sufficient to justify me, but I considered it a part of my duty to be posted in the matter, so I did it, and charged the Mesa Canal Company nothing for the work.

I made my report to the Mesa Canal Company, and I would like to submit that in answer to the question in relation to running the levels at that time.

201

By the COURT: That is, instead of submitting to a further examination at this time?

By Judge STREET: Yes, sir. We offer this in evidence.

By Judge POPE: Let us see it, please, before you offer it.

Plaintiffs, having *h*ead the instrument, object to it and prefer that the witness shall be asked the questions and be allowed to answer them.

By the COURT: Yes; I think that is proper. The objection will be sustained.

By Judge STREET:

Q. Mr. Trott, you have no employment as engineer now with either one of these canal companies, have you?

A. No, sir. I am not engaged in that capacity by either company.

Q. What is the distance from the Ayers head gate down to the division gates?

A. I will have to refer to that report to answer.

By the COURT: You may refer to your own notes that you have made in relation to those distances.

A. The distance by the canal from the Ayers check to the division gate is 2,692 feet.

Q. Do you mean by the Ayers check the Ayers head gate?

A. There is a check in the Mesa canal immediately below where the Ayers head gate is. There is no gate in the Ayers ditch now, but there is a ruins of a check just below the head of the ditch.

Q. What is the difference in the high-water mark in the
202 Ayers ditch at the point about 200 feet below the check in the Mesa canal and the high-water mark in the new Lewis ditch?

Plaintiff objects to the question and states that the witness has not proven himself competent to answer the question.

By Judge STREET:

Q. Do you know the high-water mark in the Ayers ditch, 200 feet below the check in the Mesa canal?

A. Not positively.

Q. What observation have you made as to the high-water mark at that point?

A. It has been my observation that where water remains in a canal or ditch for a given length of time it leaves traces of its elevation by being outlined on the soil. It either deposits sediment or the fluctuation causes the bank to crumble at that point.

Q. From your observation, are you able to select a point which you regard as the high-water mark?

A. There was a line of crumbling that I have just described in that thorough cut, it being quite regular, and as with assumption, not with positive knowledge, I took that as the high-water mark in the Ayers ditch.

Q. What is the difference in the elevation of that and the head of the new Lewis ditch?

A. Do you mean the floor of the head gate?

Q. Yes.

A. I took the elevation of the floor and of the head gate, and that also of the new Lewis ditch also, but I don't know as I understand your meaning by the question.

203 Q. Repeat the question, Mr. Reporter.

(Reporter reads:) What is the difference between the (referring to the high-water mark in the Ayers ditch) elevation of that and the head of the new Lewis ditch?

A. It would be very near to 2 feet higher. That is the point of the high-water line 200 feet below the Ayers check and the floor of the head gate of the new Lewis ditch. The water line is about two feet higher than that floor.

Q. Suppose the water standing in the Lewis ditch at a depth of two feet at the head gate, what would be the depth of the water backed up in the Ayers ditch by the water standing 2 feet in depth at the Lewis ditch?

A. I don't understand the question.

Q. Let me try it again. Suppose the water was standing in the new east Mesa ditch at a depth of 2 feet at the head gate, what would be the relative level between that and the high-water mark as indicated in the Ayers ditch as you have described it?

A. What would be the difference?

Q. Yes, sir.

By the COURT: In elevation?

Q. Yes, sir; how high would it back it up, or what would be the relative position of the surface of the water and the high-water mark?

A. If the water stood 2 feet in depth at the floor of the head gate of the new Mesa Canal Company's east branch—that is, the water was two feet deep on that floor—it would back the water up
204 so that it would stand within $_{1}^{1}{}_{0}$th of a foot of the water line as selected by me for those levels at the Ayers ditch (indicating upon the map).

If the water was 2 feet deep on the bottom of that floor it would back the water up in this canal until it stood within $_{1}^{1}{}_{0}$ of a foot of the water line as selected by me as the high-water line in the Ayers ditch.

By the COURT: Wouldn't that depend upon the amount of water in the Consolidated canal at that time?

A. That report is simply stating the conditions as it stood in the old Mesa canal, not in the Consolidated canal; it hadn't been constructed; that is the difference. The Mesa would back the water up, and the Consolidated is not taken into consideration in making this report.

By the COURT: Wouldn't it still be necessary in making your calculation to state the quantity of water in the Consolidated canal—that is, if a greater quantity was flowing in that canal, wouldn't it be less?

A. If a greater quantity of water was flowing in the Mesa canal than was used by the Mesa Canal Company, unless it had discharge ways it would consequently raise itself higher in the canal; then it would cause its water on top to change, and it would make it higher; but, as those division gates of the Consolidated canal are so constructed, it brings into my mind a thought that unsettles the question, because I have not gone into a study of that prop-
205 osition. For instance, may it please your honor, the western branch is some 2 feet lower than the floor of the division gates; there would be a perpendicular fall of 2 feet, and that would naturally draw the water rapidly into that branch, and the water would commence to flow naturally that way, but by a manipulation of those gates you could effect the elevation and floor of the water above, effecting the result. If it was drawn to the east the surface of the water would be higher.

Q. Suppose there was 3,000 inches of water at a given time flowing in the Mesa canal between the Ayers ditch and the east Mesa ditch; suppose, then, that 1,000 inches escaped in one direction and 2,000 inches stood at the head of the Messa canal, to base your calculation on, that left 1,000 inches in the Mesa canal. Now, take that amount, for illustration, and then take another illustration:

Suppose there was 4,000 inches of water in the Mesa canal, 2,000 of which stood at the head and 2,000 inches stood in the Mesa canal. In one case we have 1,000 inches and in the other case we have 2,000 inches of water. Does that make any difference in the relative height of the water between the high-water mark at the Ayers canal and the 2,000 inches in the east Mesa canal?

A. In running this line of levels the object was to ascertain the difference between the surface of the water as outlined and pointed out to me by two or three of the directors of the Mesa Canal Company, and it appears that the difference in the elevation between those two points is 2 feet.

Now, in answering the question that you have asked me I
206 will do so by saying that the Mesa Canal Company have so constructed their check that they can raise or lower the water without taking this check out. They are not stationary, but can be slipped in and out. They can put one foot in the east branch or 2 feet and not take any over above checks. They can so regulate those checks by planks used for that purpose so that they could receive 4,000 inches of water in the Mesa canal, and yet there would be but 1,000 running in the Lewis branch, and it would effect the water above the gates no greater than in the other instance.

(Presenting chart.) This is a rough sketch that I have made of those premises this morning that may be of some benefit to illustrate it.

By Judge STREET: Defendants will offer this in evidence as an exhibit.

(There being no objection, same was duly admitted in evidence, copy whereof is herewith presented so identified.)

Defendant's Exhibit 3.

Q. Just give that question in reference to this map to the witness and allow him to point it out to the court.

(Question repeated by the reporter.)

A. (Pointing and indicating upon the chart.) At this point below the division gates of the Consolidated canal the Mesa Canal people have constructed a check; the planks in that check are removable, and the water can be lowered above it by means of these checks.

If there is 3,000 inches of water in the Mesa canal below the division gates, these check can be taken out, and so permit all
207 of the water to pass throughout, and yet there would be a little running in the eastern branch. They can raise that check sufficiently to cause all of it to pass out of the eastern branch. If this check was permanent and stood as compared with other points at the division gate of the Ayers ditch, you would then have to figure upon what effect it would have upon their water.

If 2,000 inches came down the canal and one went to the eastern branch and the other thousand inches went to the Mesa canal, one thousand inches would have to pass over that check, and it would probably raise it 3 or 4 inches. If 5,000 inches was coming down the canal and 2,000 went into the western branch, it might raise it 1½ or 2 feet from the top of the check, then it would back the water up higher and at a greater distance up the canal than it would as the gate is raised at the present time.

By the COURT: Consequently the relative position would be in-

creased at the Ayers ditch according to the manner you have selected.

A. If a point two feet above this floor in the Lewis gate and the high-water line in the Ayers ditch are within $\frac{1}{10}$th of a foot of each other, 5,000 inches of water passing over the check, that is on a level with that 2-foot level above or near the lower branch, the water would have to be raised high enough to pass over, and that depth would be from 1 to 2 feet.

When the water is checked by an obstruction it rolls back and climbs up until it reaches a level, and then it runs over
208 itself to that check and passes over it. The flow would be accom-odated above and until it got with a few hundred feet of the check, and then it would increase it again by the overflow at the check, but it would probably check it up nearly a foot higher than the high-water line.

By Judge STREET:

Q. Do you know the capacity of the new east Mesa canal?

A. I don't know the dimentions of it.

Q. You didn't measure it?

A. No, sir; I didn't measure it. I didn't take any measurements as to its width or its depth.

Q. Did you take any measurements so as to find out the relative elevation between the bed of the new Lewis ditch or the new east Mesa ditch and the bed of the Consolidated canal at the division gates?

A. Yes, sir. The floor of the division gate and the floor of the new east Mesa canal—the head gate is about $\frac{1}{2}$ foot lower than the floor of the new east Mesa canal.

Q. How far below the surface of the ground is the new east Mesa canal sunk at the head gate?

A. I don't know. I didn't take the surface at that point.

Q. Now, then, we will suppose that 9,000 inches of water was running down through the Consolidated, and the Mesa Canal Company put in a check below the new east Mesa ditch sufficient to throw into that ditch 2,000 inches of water.

A. I would like to state that in making my examinations
209 in that brief way it wasn't for the purpose of going any further. I didn't understand that I was to be called upon to answer such questions. No man, no matter how expert he may be himself, can go through an examination like this without understanding all of the conditions, and I would much prefer that you would not ask my opinion upon things with respect to which I have not worked out and prepared myself to take such an examination and enable me to give a reasonable answer.

Q. Very well, sir. It will only take a moment.

A. Please state your question again.

Q. How far would the water be backed up in the Consolidated ditch?

A. I will have to give you my former answer.

Q. Did you take any measurements on Saturday last?

A. I did, sir.

Q. What measurements did you take?

A. I took the difference in the elevation of the floor of the new Mesa ditch—the head gate and the floor of the division-gate floor—the height of the water in the Mesa canal below the new Mesa check, the height of the water in the Mesa canal opposite the new east Mesa gate, and the height of the water in the Consolidated canal just above its division gate; also I took the height of the water in the Consolidated canal at a point opposite to the old Ayers head gate.

Q. Now take the new east Mesa canal, was there any water running in that canal?

210 A. Yes, sir.

Q. How much?

A. The depth above the floor of the head-gate was about one foot.

Q. What was the depth of the water at the division gates?

A. It was 2 feet and $\frac{3}{10}$ths.

Q. Was the water backed up above the division gate by the check in the Mesa canal?

A. No, sir.

Q. A check was in the old Mesa canal at that time?

A. A part of a check was in.

Q. Do you know whether water would have run in the new Mesa ditch at that time, if no check had been in there?

A. I don't think there would.

Q. Then the result of the check being in the Mesa canal was to throw water into the new Mesa ditch?

A. The check being in the Mesa canal and the gates being raised in the new Lewis ditch caused the water to back up in front of the Lewis gate and run through the new Mesa branch.

Q. Was there any water in the east or west Consolidated canal branches?

A. Yes; a little water was running in the east branch of the Consolidated canal.

Q. Was it anything else but seapage water?

A. That is all.

Q. Do you know how much water was in the Consolidated canal, how many inches, at that time?

211 A. I only know by the amount that was reported in the Mesa gauge of the Consolidated canal a ¼ of a mile below the Christman check.

Q. How much was that?

A. That showed 3,629 inches.

Q. Then on Saturday morning they had 3,629 inches?

A. Yes; but that wouldn't be that much water at the division gate; it would be a few hundred inches less.

Q. But at that time there was as much as 3,000 inches of water passing there?

A. Yes, sir.

Q. And at that time there was a foot of water in depth at the floor of the new east Mesa canal?

A. Yes.

Q. And 2 feet and $\frac{3}{10}$ths on the floor of the division gate?

A. Yes, sir.

Q. And the water was not backed up at that time above the division gates by reason of the check in the new Mesa ditch?

A. The check in the new Mesa ditch had raised the water very slightly, for the reason that the division gates, as they are applied to the Mesa canal, are three in number, with 3 and $\frac{8}{10}$ths of an opening between the standards and the posts. There would be always a fall over those gates.

The water above the gate would be higher, also, at any stage of the water. At that time it stood within $1\frac{7}{10}$th- of the height of the water opposite the new Mesa head gate.

212 Q. Can you give any fair estimate of the number of inches of water that was running into the east Mesa ditch at that time?

A. I didn't examine it closely enough to make a close statement, but there was several hundred inches—between 500 and 1,000 inches, I would say.

Q. We will suppose that there was as much as 2,000 inches *was* running in the east Mesa canal at that time, how much higher do you reckon the water would have stood over the division gates than it stood over the floor at the new east Mesa canal?

A. I would fix it at about 1 foot. I would do so for this reason: With the gates having a limit of discharge and this water being up against that discharge, it would decrease its opening and raise the water a foot higher than it stood that morning.

Q. Now, than, I will put this other question to you: Suppose the division gates—the floor of the canal at the division gates—was five feet higher than the floor of the Mesa canal immediately below the division gates, and a check was put in so as to run water into the new Lewis branch—or new east Mesa canal—would the water at any time be backed up above the check in the Consolidated canal to any material distance?

A. I don't know how high 2,000 inches of water would raise the water above the floor of the gate in the east branch of the Mesa canal. I would have to measure the water to determine what elevation 2,000 inches of water would be above the floor. But I can answer the question in this way:

That should the water stand 2 feet above the floor in that 213 gate where the east branch of the Mesa canal is it would be $1\frac{5}{10}$ths higher than the floor of the Consolidated Canal head gate.

Q. Do you know the Christman dam or check?

A. Yes, sir.

By the COURT:

Q. Suppose there was a check put into the Mesa canal below the east Mesa canal, and this check was sufficient to force water into the Mesa canal to the extent of 2,000 inches, what would be the result on the floor of the Consolidated canal?

A. That is a hard question to answer. If the water stood 2 feet

above the floor of that gate (pointing to the map) the surface of the water would stand 1½ feet above the floor of the division-gate bed—about 2,000 inches of water. You would have to have a fall—that is, to push itself forward to cause itself to pass through here (indicating). And those gates being small, the water would have to be raised in front of those gates to cause the water to force itself through. 2,000 inches wouldn't fall very well through that, but that added to the 1½ feet on the floor of the division gate and the water passing through those three gates that I have described would be checked by this dead water below, and it would raise the water, I would say, some 2 feet higher than the water in there (indicating).

What I mean is that the surface of the water above the division gate would be 2 feet higher than the surface of the water in the new Mesa canal.

Q. That is, at the foot of the Consolidated? 2 feet higher
214 than it would be in the new Mesa ditch?

A. Yes; if the water stood at a certain elevation there it would stand 2 feet higher here (indicating).

Q. On Saturday did you notice the wheel there?

A. Yes, sir.

Q. Did you notice any perceptible effect, as you saw it, that the check would have upon this wheel?

A. I didn't examine it thoroughly. It would have some effect, but as to how much I don't know.

Q. Would it increase or decrease the volume of the water?

A. It would effect this below.

Q. And to the extent, you don't know?

A. Yes, sir.

Q. But it must necessarily effect it to some appreciable extent.

A. The wheel that I saw has not got a very appreciable effect now, but it would effect it.

By Judge STREET:

Q. While you are on that wheel, tell us all you know and have seen about that wheel and all that you know about that water power.

A. It would not do for me to tell them about that now, for that is a special branch that I am not posted in, and I would not like to give any opinion on that.

By the COURT: That requires a kind of a millwright for that line?

A. Yes, sir.

215 By Judge STREET:

Q. Is there any practical power to be obtained by this fall of five feet at the division gates—with the water running through there which normally naturally runs through there—with your knowledge of the amount of water that the canal does carry, year after year, is there any practicable power to be obtained there?

A. There is no continuous power.

The Mesa canal receives at this point at certain times of the year less than 1,000 inches and sometimes less than 500 inches of water, and again it has been receiving at different times as high as 7,000 inches of water, and it receives it through these gates.

The water is separated there, and to get in any one given power or to create any five-foot fall the gates would have to be arranged for it.

Q. Have the gates been constructed with reference to the preservation of any water power?

A. I don't know as to that, but I shouldn't think so.

By the COURT:

Q. Then your idea is that it is a variable power?

A. Yes, sir.

By Judge STREET:

Q. About how much of the year—how many months of the year or what number of months would there be any fall of the water there which would make any water power of any practical value?

A. I would have to determine what the practical value of
216 a water power was. After the power has been once created a — is practicable because there is no expense; the power is generated by the fall of the water.

Q. Would you say they are within the conditions necessary to keep it?

A. I wouldn't like to answer that question without studying it.

By Judge STREET:

Q. What effect would that check have in the Mesa canal on the flow of water—the under and overhead flow—say on 20,000 or 25,000 inches, with all of the gates open?

A. It would depend upon where that water went. If 7,000 inches went through the gates of the Mesa canal and the balance should run into the eastern branch—a check in the Mesa canal—on my estimation would have no effect as to the elevation of the water above the division gate; but should the remainder of 13,000 to 15,000 run into the western branch, I should think the water would have to be raised a little higher than the necessary requisite in order to force through the Mesa check the 7,000 inches.

Q. Will you explain why it would have that effect?

A. The water running into the eastern branch runs probably on the same grade as the canal above, and it would have to back on itself in order to make that sharp angular fall of the water. Water doesn't like to be obstructed; it will cause it to back up on itself, and if the outline is an angular one it would raise the water upon the banks of the Mesa canal and check its flow. It would then turn and run out of the eastern branch on that grade it had
217 above and the surface would be much higher than the surface of the water running into the western branch for the reason of the 2 feet difference in the grade. I couldn't tell you what

the difference is, because I don't know exactly the amount of the result.

Q. You say that you know where the Christman check is?

A. Yes, sir; I do.

Q. That is about what distance below the head of the canal?

A. It is about 3 miles.

Q. What is the size of the canal above the Christman check as compared with the size of the canal below? Is it any appreciable amount or not?

A. The size of the canal above the Christman check to the division gate—½ or ¾ of a mile—is nearly the same as it is below the Christman check—that is, above the Ayers gate the Consolidated canal is much greater than that is below, but I don't know how much greater.

Q. If water was flowing into the Consolidated canal from the Salt river and running down to the Christman check and there dropping down five feet, than running on down to the division gate and they being open and dropping down 5 feet, would the fact that the check in below the division gates so as to raise the water up to the floor of the new Mesa canal, would that effect the amount of water which would run into the Mesa canal at the Salt river?

A. No, sir.

218 Q. It would not effect the carrying capacity in any particular?

A. No, sir.

Q. Then the fact that the check is in at the new east Mesa canal doesn't effect the carrying capacity of the Consolidated canal as a whole?

A. That is another question. I don't know about that.

Q. Could it effect it as a whole if it runs down the Consolidated canal and drops five feet? At the Christman dam it comes down to the division gate, and is check at that point so as to run it into the new east Mesa canal. Could it effect the carrying capacity?

A. If the Consolidated canal at the Christman's check had a fall of five feet, and that was in permanent, and it was a fixture of five feet or of any height, that would cause a direct fall over it, and it wouldn't raise or wouldn't effect the water above it. Water has $\frac{2}{10}$ths — and 10 feet below a certain line of fall. It doesn't effect it above if there is a thorough pronounced division line of the channel in the canal. The water below doesn't effect the flow of the water above unless it is joined.

By the COURT:

Q. How would it effect it between the two given checks, suppose they were two miles apart? What effect would the lower check have upon the canal between that point and the other one?

A. It would have the effect to destroy the flow of the water and retard the flow and give it a new grade for the canal.

219 By Judge STREET:

Q. Wouldn't that grade be regulated by the amount of water flowing through the canal as well as by the velocity?

A. A small amount of water would be checked and practically remain still above the check, but a large amount of water would increase the velocity, and it would pass much more rapidly through this distance that is effected by the check.

Q. In what way, if any, would the check that is put in by the Mesa Canal people just below the new east Mesa branch have upon the Consolidated canal?

A. I would have to familiarize myself with the conditions of the Consolidated canal, and I would have to know something about the desire to distribute that water. I couldn't answer that question without further knowledge.

Q. In your judgment, would it damage the canal above the division gate?

A. But very little.

Q. Would it damage it in any way?

A. It might to a minimum extent when using the extra amount of water that the river sometimes affords.

Q. In what way?

A. Well, that refers back again to the 2 questions that I have attempted to answer. It would depend as to the distribution of the water through the east and the west from the division gates.

Q. But what damage, if any, could it be to the canal above the Ayers head or a relative point on the Consolidated canal
220 opposite it?

A. The damage, if any at all, would be lessened at that point, and would probably not effect the flow at that point.

Q. At what point would it be felt, if felt at all, at any other than the division gate?

A. If felt at all it would have to go back until relief would be given, and that is a hard matter for a man to state without he practically takes a personal observation of the water at this point; but he couldn't call it a definite answer as to that fact. There might be no effect, and then again there might be a slight effect, but it wouldn't be a serious one, if any.

Q. State whether or not the distance to which the water would be backed up on the canal depends upon the grade of the canal.

A. Yes; and the height of the obstruction.

Q. With a canal of a very slight grade and a very slight obstruction would back the water further back on the canal than it would on a canal which was of a steep grade?

A. Yes, sir.

Q. Then if the Mesa Canal people have had this grade changed between the division gates and the river by the Consolidated Canal Company so as to make the head of the canal lower in the Consolidated canal than it was in the Mesa, and the foot of the Consolidated canal higher than the foot of the Mesa, an obstruction that would be placed in the old Mesa canal would back the water further back on

the canal than it would at the old condition of the Mesa canal,
221 under the assumption that I am making in the Mesa canal?

By Judge POPE: And assuming the grade to be uniform all of the way?

By Judge STREET:

Q. No, sir; leaving the matter of the grade out of the question.

A. You are assuming that the elevation at the Mesa is higher at the river than the Consolidated canal?

Q. Yes, sir.

A. And that the head of the Mesa canal at the division gate is lower than the head of the Consolidated canal?

Q. Yes, sir.

A. Now you have got a grade. If that grade is broken the effect would be different.

Q. I am speaking of a uniform unbroken grade.

A. Very well. The grade of the Consolidated canal is less than the grade of the Mesa canal, and one foot construction in the Consolidated canal would obstruct the flow of the water to a greater distance above it than one foot obstruction in the old Mesa canal.

Q. Now you say that you took some measurements at the old Ayers head gate on Saturday last, did you?

A. I took some elevations.

Q. Did you see a stake that was driven there into the ground a few feet above the old Ayers head gate that was pointed out to you as having been used by Mr. Coad?

A. Yes; and then the stake on the south branch of the old
222 Mesa canal about 25 feet above the old Ayers ditch check, which Mr. Coad himself told me was where I could find the stake.

Q. You have no doubt but that you found it?

A. I found the stake at the point he mentioned, and I saw no other one in that vicinity.

Q. Do you know whether he told you that was the stake that he used as the line indicating the high-water mark?

A. Yes, sir.

Q. What, in your judgment, is the high-water mark with reference to that stake?

A. In my judgment—and I have been very careful about forming it for this reason—that this elevation at the high-water mark at that point effects every water-user in the Salt River valley. The elevation there effects the capacity of the Mesa canal and determines it.

The old Mesa canal on my map here (indicating) runs a distance of from 1,500 feet to 2,000 feet; that is the old bed, and it there yet remains for that distance. I went on yesterday alone for the purpose of looking into the matter again. I was at the head of the Ayers gate ditch, and again last Saturday and yesterday I went up there to look at it and tried to form an opinion that would be close to what it was, and that opinion today is that the water stood in the

Mesa canal at one time about $\frac{5}{10}$ths or $\frac{6}{10}$ths higher than the top of that stake.

If the top of that stake is fixed as the high-water line of the Mesa canal it is to determine the maximum capacity of the
223 Mesa canal prior to the running of the Mesa Canal water through the Consolidated canal.

Q. You say that it determines the capacity of the Mesa canal prior to the time of running its water through the Consolidated canal?

A. Yes, sir.

Q. You say 5 or 6 tenths higher than the top of the stake. Do you mean tenths of a foot?

A. Yes, sir.

Q. Will you give us that in inches?

A. Yes, sir; 5 tenths is six inches.

Six-tenths would be 6 or 7 inches higher than the top of the stake.

Q. What about elevations? I will ask you this question: Did you take them in the interest of the Mesa Canal Company?

A. I explained that before going into this examination. No.

Q. Well, we don't care anything about that. I simply wanted to show that he is not interested simply and only as the water commissioner. Did you take any elevations there?

A. Yes, sir; I did on Saturday.

Q. What elevations did you take?

A. That's when I took the elevation of that stake as compared with the elevation of the water line that was pointed out to me and that apparent water line that I worked from on June 11th. *A.* Then there is about one foot and 2-tenths difference between the water line that I started from and the top of the stake. The
224 water line as used was $1\frac{2}{10}$ths higher than the top of the stake.

Q. And the water at that point—just explain that.

A. I will say that I took another elevation of the level line on the Ayers ditch at its lowest point, some 75 feet below the check, and then I took the elevation of the top of that stake mentioned, which stands on the south bank of the old Mesa canal, about 25 feet above the Ayers ditch, and I took the elevation of the surface of the water in the Consolidated canal at a point east of that stake.

I took the elevation of the ground along the Ayers ditch and the elevation of the surface of the ground at a point near the northeast quarter of section 15 and at a point about 500 feet west of that corner.

Q. Will you give us seriatum the results of those investigations and elevations which you took?

A. On top of the stake referred to, one foot and 2-tenths lower than the point I started from on June 11th, selected as being the high-water mark and line of the Mesa canal and of the high-water line in the Ayers ditch. The top of this stake between 4 and 5 shows below the surface of the ground, where I took it on that level. The top of the stake was $\frac{1}{2}$ of a tenth higher than the surface of the

ground at a point near the northeast corner of the northeast quarter of section 15, and ½ tenth lower than the point of the surface of the ground about 500 feet west of the northeast corner of the northeast quarter of section 15.

225 Q. And you now regard the high-water mark as from 6 to 7 inches higher than the top of that stake?

A. Yes, sir; the top of that stake referred to.

Q. The elevations that you took at the Ayers head gate was taken with reference to the top of the stake?

A. The relative elevations—they were not taken relative to that, because I had taken those before I had read the stake, but I am giving you the apparent elevations with that point.

Q. Do you know the difference in the elevation between the northeast corner of section 15 and the floor of the division gates?

A. Yes; I can tell you that by looking at the book—the point where I took the surface of the ground, 500 feet west of the corner of the northeast quarter of section 15. The surface of the ground at that point is about $\frac{2}{10}$ths of one foot higher than the floor of the division gate.

Q. Then gravity wouldn't take the water from that onto the land 500 feet west of the corner?

A. It would run through the division gate, but it would have to be raised from the gate, for the tendency of the gravity is the other way.

Q. And it would be utterly impossible for the water to run from the old level of the old Mesa onto section 15 without being dam-ed to back it up, as it were, for a considerable distance?

A. I don't understand the question.

Q. Well, I will withdraw it, for it is simply argument.

Question withdrawn.

226 Q. What other measurement did you take on Saturday, or levels or grade levels—Saturday or yesterday?

A. I took some levels on Saturday. I think they have all been referred to in my examination already.

Q. Is there anything else that you desire to state in this relation?

A. There is one point that I would like to state. The height of the water or difference in the elevation of the height of the water in the Consolidated canal just above the division gate and the height of the water in the Consolidated canal at a point east of the old Ayers ditch check was 2½ tenths, and that with the water standing 2½-tenths higher than it stood in the division gate.

Q. How much water was there, then, in the canal that you know of?

A. There was between 3,000 and 3,500 miners' inches.

Q. Did you take the elevation of the water at a point in the Consolidated canal just east of the old Ayers ditch?

A. I did, sir.

Q. What was the difference in the elevation or the real elevation

of the surface water in the Consolidated canal at the point you took it and the high-water mark at the Ayers head gate?

A. There are three high-water marks at the Ayers head gate. The first one, on June 11th, it was $1\frac{2}{10}$ths above the stake, but the high-water mark, as I consider it now, is 5 or 6 tenths above the stake, and the high-water mark before taken was considered to be on the top of the stake.

227 In relation to the top of the stake, I will answer that first: The surface of the water was 2 feet and 2-tenths in the Consolidated canal at that point above the top of the stake referred to as being the high-water line in the Mesa canal above the Ayers ditch check.

Q. Do you know how far the check which is now in the Mesa canal is below the division gates?

A. I didn't measure it, but I would think it would be in the vicinity of 100 feet and over.

Q. What appreciable effect would it have upon the Consolidated canal to remove the check from the division gates, say' 125, 150, or 200 feet, if you please, down to a point where the check is in the Mesa canal—what appreciable effect would that have upon the flow of the water or anything else in regard to the canal?

A. That is, if that check was taken down the canal?

Q. Yes.

A. That would depend on the grade that the canal has.

Q. Suppose that the division gates were taken out from the point that they are now and were removed to a point where the Mesa people have their check, what appreciable effect would that have?

A. Above or below it would have very little. The changing of the division gates 100 feet would cut but very little figure, because when the canal has a grade of 2 feet to the mile it has a fall of about $\frac{37}{100}$ths, or $\frac{1}{3}$ of a tenth fall per 100 feet.

Q. Suppose they left the division gates in where they are now and put in another set of division gates down where the Mesa

228 Canal Company have their check, at the same height that the Consolidated division gates are, what appreciable effect would that have upon the Consolidated canal, any?

A. It would have an effect, and that effect comes in so depending on the fact whether the Consolidated canal wanted the water.

Q. I refer simply to the effect on the structure.

A. A check that is below on the structure that is in there, if it didn't raise the water too high, would have a tendency to help the check at the division gate, for the reason that it would form a cushion between the two gates and prevent the undertow of the water from washing away the banks.

Q. Independent of the water-users, does the check below the division gate which the Mesa people have in there do any damage to the Consolidated canal or to its banks?

A. As I saw them the damage would amount to nothing, but if the checks was in I couldn't tell, but so far as I saw it did no damage.

Q. Instead of putting in a check, which the Mesa people have put

in there, suppose they had raised the bed of their canal on a level with the Consolidated canal, would that have had any appreciable effect upon the canal structure?

A. Certainly.

Q. What damage would it have been to the canal of the Consolidated Canal structure? Here (indicating upon the map) is the water in the canal dropping down here. Let us take and raise the Mesa canal up on a level with that. What would be the damage?

229 A. I thought you had reference to the gate being a structure of the canal.

Q. Well, would it be any damage to it?

A. That question comes in again. You see the grade of the canal being changed, it would raise the water.

Q. You are not speaking about the waterfall, but about the canal structure. Let me call your attention to the fact that these people allege that they have been injured.

Now, if we take our bed and lift it right up and let the water flow on the same grade what injury would it have been to the canal constructed by the Consolidated Canal Company?

A. The fall creates a velocity when it goes and that effects the flow for a given number of miners' inches and it looses its depth, and that fall creates the flow all along the canal for quite a distance, consequently its depth would be less than if it was the same.

Q. We are speaking of the canal structure—in the canal itself.

A. It is constructed for the purpose of permitting the water to flow in it.

Q. Now, the earth part of the canal or the canal bed and sides, will they be affected in any way to its damage by reason of the lower canal being on a level with the upper canal and allowing the water to flow on the same grade?

A. Judge, I cannot get in my mind the value of a dry canal. It is simply a continuation of the canal above, and, so far as that is concerned, it is on the same grade, and if it is of the same

230 width, the same depth, then it is the same canal.

Q. And it doesn't affect the value of the canal structure?

A. A dry canal has no value; consequently it would have no effect upon it.

Q. If we have a dry canal and raise this up and make it to be valuable (indicating upon the map), and we turn a flood of water in, independent of the quantity of flow and the values which depend upon the quantity of the flow, will the flow of the water be moved or modified or damaged in any way to the upper structure?

By the COURT: Is there any difference between that question and the one that you have just answered?

Q. The judge has constructed a dry canal with a uniform grade to a given point, and now he extends that canal 100 or 200 feet farther, and he asks if the water is turned in there and flows through that, whether by giving 200 or 300 feet further it will have any increased effect or appreciable effect upon the structure above.

A. I cannot say that it would.

By Judge STREET:

Q. The check that has been put in by the Mesa people below the division gates is such a check as can be taken out and put in again and so used that it does not affect flow of the water at all—that is, it is not fixed, permanent check, so that all of the water is effected by it unless it is so adjusted?

A. It is a check the standard of which remains permanent, and the bulkhead will naturally cause an obstruction of the canal,
231 but the gates can be taken out or put in so as to regulate the depth of the water above.

By the COURT: Suppose a canal flowing a given distance and running along comes to a fall or a drop of 5 feet, 2 feet, or, say, 1 foot, that is the effect of that fall or drop on the increase of the quantity of water in the canal itself?

A. What is the tendency?

Q. Yes; that is what I mean.

A. It acts as a greater discharge and increases the velocity of the flow in the canal.

Q. Well, suppose you found the situation of matters of that kind, and that you took the canal below the drop and raised it up on a level with the canal above the drop, what would be the effect?

A. It would effect it very slightly, because you have prolonged the distance between the point above where this velocity begun and added a little bit to it, and in running that canal on the level it would add just a shade of obstruction to the flow above it.

If you increase it indefinitely you would destroy the flow, and the only way that you would bring this water back would be in the current of the water and the supply of the source.

Q. And what effect it would have would be to augment the — by the limited discharge of the water?

A. Yes, sir.

Q. If the ultimate discharge of the water was 5 miles distant, would the obstruction be less or greater than if the discharge
232 was 100 yards from where the raise took place?

A. I will answer that in this way: If you construct a canal to carry 10,000 inches of water and put a fall in two miles below its head, the current of that two miles would be dependent upon the grade and would be increased materially by that fall at that distance. Now, should you extend that fall to about—say put it in 4 miles below—the velocity that started in in the first place would be decreased by reason of the distance?

A. It depends upon the depth of the water over the fall, and it is a very difficult question to answer correctly, only I can say in general terms that the further away you make the fall the less influence there will be.

By the COURT: Then it is relative to the point of discharge?

A. Yes, sir.

By Judge STREET:

Q. Now you say that when the water makes a drop of five feet it

makes a draw of the water and increases the rapidity of the flow above?

A. Yes, sir.

Q. And that increases the carrying capacity of the canal?

A. Yes, sir.

Q. Now, as you take out this drop you take out the draw—that is, as you take out the one you take out the other?

A. No, sir.

Q. Well, if you take out the draw it will be taking out the drop and decreasing the amount of drop of from 5 feet to 2 feet?

233 A. Well, it will fall so many feet the first second and so many the next second, and after the water has passed this drop it is separate and distinct from this water above the drop. It has fallen and turned itself loose to get wherever it can go. It is not a part of that water—it is broken into and becomes entirely separate from that water—and if that fall is only ½ a foot instead of 10 feet the break is practically the same. The curviture would be a little more pronounced than it was. That is all.

Q. Then the height of the fall has nothing to do with increasing the velocity above the fall?

A. Very little. So long as you have a distinct outline between the elevatien of the water below and the elevation of the water above.

Q. Then before the check which is in the Mesa canal would have any appreciable effect upon the flow of the water above the division gates it would have to raise the water substantially onto the division gate—on to the floor?

A. No, sir; for the simple reason that I have tried to explain. There are three gates in the Consolidated, at the division gates, that sends water to the Mesa canal. Those have a discharge capacity of 3 feet and 8 inches, and the water when it goes through there — (illustrating upon the map). This distance between these gates is 3 feet and 8 inches, and the water in passing through that opening rolls in and meets itself just above where it commences discharging.

234 The water surface is a shade line. It is at the sides. It would have its base in here (indicating). The water at the center, just below the gate, is a good deal higher than it is on either side. The water rolls into itself and the velocity contracts and precipitates it in just above these standards. The water is an eddy here, and this water flows back against it.

This fall is what precipitates the flow; it comes through and forming a (perabula?), protecting that as it comes past the gate. Now, the obstruction below here effects that water, the water being discharged through these gates, and it affects it in the same way, so that no man can tell the extent of it.

By the COURT: And for a certainty it requires an actual observation?

A. Yes, sir.

By Judge STREET:

Q. How will it affect it—that is, in character? Will it affect the flow?

A. It affects the discharging capacity of those gates, and by affecting the flow of water through the gates it will have a tendency to elevate that water above it in order to give it increased force, and there will be an obstruction below.

Q. If the water is not backed up so as to raise the surface of the water at the falls above—which is above Christman's—would it have any effect upon the general character and capacity of the canal—that is, if the water above the division gates is not backed up so high as to affect the surface of the water and to raise
235 the surface water at the falls at Christman's, would the fact of a check being in at the east Mesa ditch effect the general carrying capacity of the canal?

A. Certainly not. The effect of the water would be to ooze under at some point between the division gates and the Christman check.

Q. And if it did ooze under it wouldn't effect the flow of the water above the Christman check?

A. No, sir.

Q. I think there is one elevation that I forgot to ask you about, and that is the difference in the elevation on Saturday last, as taken by you, between the surface of the water below the division gates and the surface of the water above the division gates?

A. The surface of the water below the division gates, immediately opposite of the new Mesa canal gate—the surface of the water above the division gate was $1\frac{7}{10}$ higher than the water below the division gate immediately opposite the new Mesa head gate.

That is all.

Cross-examination.

By Judge POPE:

Q. The effect of the drop or fall in the canal at any point is to add carrying capacity to the canal?

A. Sometimes they are put in that way; sometimes for convenience sake—but you will have to qualify the question.

Q. Well, suppose there is a canal one mile long and it has a grade of two feet to the mile at the lower end of the canal; now, we will suppose that the water is two feet deep in the canal, and you
236 have a drop at the lower end of two feet, is not that equivalent to a fall of four feet grade to the mile?

A. No, sir.

Q. The effect of a fall is to take away the wall of the water that holds it back, isn't it?

A. You go with a broken surface line and the water carries itself between this broken line; now, if you have two miles down in the canal with a grade of two feet, you have a break in the surface line, and if you go again you have another break and the canal has steps

in it, and the grade of the canal would be broken, and sometimes these falls of water would fall much more rapidly.

Q. And that is equivalent to increasing the grade of the canal?

A. Yes; but not to the extent of four feet to the mile.

Q. If the water is two feet deep and the grade of the canal is two feet to the mile, and there is a wall of water two feet high to check the flow; now, if you make a drop there it takes away that two-feet wall and adds to the capacity of the grade?

A. Yes, sir; but it doesn't double the grade of it.

Q. Take this Consolidated canal at the division gate, there is a drop of something like five feet there?

A. I don't know; I think so.

Q. Suppose the water is dam-ed up there by a stop check-gate down below, so as to raise the surface of the water below in the Mesa canal on a level with the floor of the division gate, that checks the flow a little, you say?

A. Yes; some slightly.

237 Q. Suppose you raise it 6 inches higher than the floor of the division gate, that is equivalent to adding 6 inches to the check in the canal?

A. Yes, sir.

Q. Take the floor of the head gate in the new Mesa ditch—that is put 6 inches lower than the floor of the head gate—the division gate?

A. Yes, sir.

Q. Now, assuming that the bottom of the new east Mesa ditch is on the same grade with the floor——

A. (Interrupting.) I don't know whether it is or not; it is about the same grade.

Q. It is 6 inches lower than the floor of the division gates?

A. Yes; I guess so.

Q. Now, you dam up the water in the Mesa canal 6 inches, so as to put 6 inches on to the floor of the head gate of the East Mesa canal, and thereby you have raised the water even with the floor of the division gate?

A. Yes, sir.

Q. Now, raise it two feet high; isn't that equivalent to a stop of 18 inches in the Consolidated canal?

A. There would be a stop of at least that much in the Consolidated canal, provided the water stood still and only a little water was running through the east branch. That can be so regulated that the Mesa canal can receive 5,000 inches at the same time, and the water would stand two feet deep on the floor of the new Mesa Canal

238 head gate, and standing $1\frac{5}{10}$ths on the floor of your gate, provided it wouldn't be held back and forced to a greater height by the backward capacity or discharge in the head gate itself.

Q. Leaving that out, the raising of the water to a 2-feet depth in the head gate of the east Mesa ditch raises it $1\frac{1}{2}$ feet above the floor of the division gate?

A. Yes, sir.

Q. And that is equivalent, in general terms, to an obstruction or stoppage of 1½ feet in height?

A. No, sir; that is something I cannot answer, but I think it would add about a foot to the height of the water. We are speaking of the Consolidated above.

Q. You said a while ago that yesterday the fall between the point opposite to the Ayers head gate and the division gate was about 3 inches.

A. I said the difference in the surface of the water at the point of the division gate and the surface of the water at the point of the Consolidated canal east of the Ayers head gate was about 3 inches—three inches higher at the point of the Consolidated canal east of the Ayers head check.

Q. The water in the canal was very low yesterday?

A. I took that elevation on Saturday.

Q. How much water was there there at that time?

A. There was between three thousand and thirty-five hundred inches. I don't call that low water.

239 Q. Now, if the canal was carrying 15,000 inches the fall would be greater—that is, the difference in the elevation from the division gate to the head gate of the Ayers ditch would be greater?

A. You bring in again that distribution at the division gates.

Q. But leaving that out of it, it would be greater?

A. I believe it would. I believe the elevation would be greater.

Q. The effect of raising the water on the floor of the division gate, which we have spoken of a moment ago, is in the first place to retard the flow of the water above the division gate in the Consolidated canal?

A. Do you mean the structure of this gate?

Q. I say the raising of the water in the division gate—the raising of the water below the division gate—to, say, 1½ feet below the floor of that is to retard the flow of the water in the Consolidated canal?

A. Yes, sir.

Q. And that increases the deposit of the silt in the canal?

A. Yes, sir.

Q. And diminishes the capacity of the canal?

A. Yes, sir.

Q. And at high stages of the water it will increase the danger of breaking the banks of the canal?

A. Yes, sir.

Q. And of course it would destroy the waterfall?

A. Yes; there would be none.

Q. We were speaking of the effect of the flow of the canal.

A. Yes, sir.

240 Q. Who went with you last June when you took your first high-water mark at the Ayers head gate?

A. I had William Standage and a Mexican by the name of Jose Wellman. Mr. Sirrine was there and Mr. Moot was there and Mr. Lewis.

Q. Was Dr. Wilbur there at that time?

A. I don't know.

Q. Who asked you to go up there in the first instance?

A. I don't know.

Q. Who pointed out the place that you adopted as the place of the high-water mark?

A. I think Mr. Serrine did.

Q. Did he tell you anything about the committee of the company having established the high-water mark some time ago?

A. I don't know. He might have done so.

Q. Did he show you the high-water mark that was previously established by the company?

A. He did not.

Q. Did you see it?

A. I did not.

Q. Did you know of its existence at that time?

A. I did not..

Q. You were entirely in the dark as to that spot?

A. Yes, sir.

Q. The high-water mark that you took then was a little over a foot above the one established by the committee of the Mesa

241 Canal Company?

A. Yes; that was one and two-tenths feet above the top of the stake.

Q. That is a little over 14 inches higher?

A. Yes, sir.

Q. Did they tell you at that time that during the construction of the lower part of the Consolidated canal that they did raise the bank of the old Mesa ditch for the purpose of running some water around for stock uses, or for any other uses? Did you know of that?

A. I think so.

Q. And that they had raised the banks of the old Mesa canal. Did you notice that the banks had been raised for some distance along the Mesa canal when you were there last June?

A. I think I was told so.

Q. Yes, sir; a few feet.

A. I think I was told that the banks of the Mesa canal—the northern bank of the Mesa canal beginning at a point near the Ayers head gate—had been raised higher than it was before.

Q. Did they tell you the purposes of that?

A. I think the explanation given was that it was to raise the water so that the dredger could work in the cross-cut canal.

Q. That was the Consolidated Canal dredger?

A. Yes, sir; I think that was the reason.

Q. And when you went back there on Saturday or Sunday to ascertain the different elevation for the high-water mark

242 you think you found the original high-water mark too high?

A. I didn't determine that it was too high.

Q. But in your opinion it was, and you have now adopted the one you have last established?

A. Yes, sir.

Q. And that is 6 or 7 inches above the one established by the Mesa Canal Company?

A. Yes. I got into the canal, and I went up and down it three or four times, and got out and examined the banks along that whole stretch, as I wanted to be as near correct as possible in giving my testimony.

Q. And the fall of the ground from that point (indicating upon the map) down to the division gate is very slight?

A. The difference in the elevation of the surface of the ground of the two points I think is slight.

Q. You have already given 3 inches difference as the elevation in the water in the Consolidated between the two points.

A. Yes; but that cuts no figure as to the elevation of the ground.

Q. The depth of the water in the Consolidated on Saturday or Sunday was how much?

A. At what point?

Q. At the division gate.

A. It was 2 and $\frac{3}{10}$ths feet.

Q. And that is the depth for 3,500 inches?

A. Yes, sir.

Q. You couldn't tell how much it would be for a volume
243 of 15,000 inches in that canal, could you? It would be several feet more?

A. No, sir; I couldn't tell. It would be more, but I couldn't tell how much more.

Q. The difference in the elevation of the water above the division gate and below it was one and seven-tenths feet?

A. Yes, sir.

Q. How much had the Mesa canal backed up the water then, assuming the fall to be five feet? They had backed it up about three feet, hadn't they?

A. Yes, $3\frac{3}{10}$ths feet.

Q. And that is a diminution of three feet in the waterfall?

A. Yes, sir, assuming that the fall was five feet.

Q. Do you know what the average amount of water has been for the present year flowing there in the Mesa canal at the division gates?

A. I have a record of it.

Q. You need not give it exactly, but give an idea of about how many thousand inches it would average for the year.

A. Well, that answer to the other question that I have a record of it—I mean a record of the number of inches flowing in the Mesa canal at the point where the gauge stake is, not at the division gate. There is a slight waste of some small ditches coming out there.

Q. Leaving them out of the view, can you tell how many inches on the average?

A. I cannot tell you, because they have had a number of
244 raises, and sometimes the Mesa fell 6 feet and sometimes it didn't, and I wouldn't like to answer that question without consulting my book.

Q. Do you know the Lewis ditch?
A. Yes, sir.
Q. What is that ditch; what relation does that ditch sus-
248 tain to the Mesa canal?
A. It is a lateral ditch of the Mesa canal.
Q. And it is taken out for what purpose?
A. For the purpose of irrigating lands under it.
Q. When was it taken out?
A. In 1878.
Q. Have you been irrigating under that ditch?
A. No, sir.
Q. But you were a zanjeiro under the Mesa at one time?
A. Yes, sir.
Q. When was that?
A. It was early in the 80's.
Q. And for how long were you zanjeiro of that canal?
A. It was for two or three years—as much as 2 years any way.
Q. Do you remember in what years you were zanjeiro of that canal?
A. I do not remember.
Q. At that time was the old ditch dug?
A. Yes, sir.
Q. And it was used?
A. Yes, sir.
Q. Who was using it at that time?
A. There was quite a few.
Q. Will you point out the users under this old Lewis ditch?
A. (Examining map.) Well, that is marked pretty nearly right. It runs through sections 14, 24, and 30 diagonally; consequently it could irrigate a part of number 19 and any of these sections
249 below here—23 and 25.
Q. Did it irrigate section 36?
A. Yes, sir; a part of it.
Q. Did it irrigate any in the range below or township below?
A. I don't think it did, but it could have done so.
Q. Did it irrigate the lands in sections 25, 36, and 23?
A. It irrigated sections 25 and 36; most of those two sections were irrigated by what we called the east ditch.
Q. And for what purposes were they irrigated?
A. For farming purposes.
Q. State whether there was any check put into the Mesa canal prior to the construction of the Consolidated canal for the purpose of throwing the water or forcing the water into the old Lewis ditch.
A. Yes, sir.
Q. When was it put there?
A. It was early in the 80's we put checks opposite to the lateral all the way up.
Q. What kind of checks?
A. They were lumber checks.
Q. Through what years did you know of checks remaining in the Mesa canal to through water into the Lewis ditch?

A. In 1881, 1882, and probably in 1883. I wouldn't be positive about the year 1883, but I think so.

Q. Do you know the new east Mesa ditch?

A. Yes, sir.

250 Q. Who built it?

A. I know some of the parties.

Q. And the Mesa Canal Company owns it?

A. Yes: they are stockholders in that Mesa canal.

Q. Were they the old irrigators in the old Lewis ditch?

A. Some of them were.

Q. Do you know what were the purposes of that canal?

A. It was to irrigate lands.

Q. What lands?

A. It would be the same line of sections that the old canal irrigated, and it would reach a little further up on them.

Q. Do you know what lands are irrigated by the new that were not irrigated by the old ditch?

A. There is no new sections, but *there* are a part of the same sections. The old canal run- diagonally, and they run it as high as they could get it. I think the new canal runs higher in order to cover more ground in the same sections.

Q. How far apart were those canals or ditches?

A. About ¼ or perhaps less than ¼ of a mile.

Q. Do you know whether the new ditch runs into the old ditch at any point?

A. I thi*kn* it does, down on section 30.

Q. State if the new ditch was built for any other purposes than to irrigate lands.

A. I think not.

Q. Are you acquainted with the Ayers ditch?

251 A. Yes, sir.

Q. When did you first become acquainted with that ditch?

A. About 1890.

Q. Do you know what lands were irrigated by the Ayers ditch?

(Interruption by the COURT:) When did you say that this check was put into the Mesa canal?

A. It was early in the 80's.

Q. At what point was that put in?

A. It was in the Mesa canal opposite the old Lewis ditch; in fact, opposite to all of the laterals. We put the check into the Mesa canal and pushed the water out into the old Lewis ditch.

Q. What was that built of?

A. It was built of lumber.

Q. And that was in 1880?

A. Yes, sir.

Q. In 1880 and thereafter?

A. Yes; along up as high as 1883, I think.

By Judge STREET:

Q. Just repeat my last question, Mr. Reporter.

(By the REPORTER:) Do you know what lands were irrigated by the Ayers ditch?

A. It was made principally for the section 15, but it run also onto section 16.

Q. Do you know anything about the use of that ditch, so you could give us the information as to what extent it was used, if you know?

252 A. Not very much. It flooded the north half of section 15 over once; that was in order to enable them to make a final proof on the land.

Q. Was there any other portion of section 15 irrigated?

A. Mr. Moote irrigated some in the south half of section 15.

By the COURT: I don't know the use of the Ayers ditch in this matter.

A. The Ayers ditch is the highest point we have. In order to utilize the water, we have to get it out onto the Mesa land.

By Judge STREET:

Q. You are not a zanjeiro of the Mesa canal or of the Consolidated canal?

A. No, sir.

That is all.

Cross-examination.

By Judge POPE:

Q. When was the stop taken out at the old Lewis ditch?

A. I don't know.

Q. Do you know the practice of the company in regard to allowing a stop there between 1883 and 1890?

A. I know that they abandoned the use of those stops—of all of these checks.

Q. You know that they stopped the use of the checks after you were zanjeiro?

A. Yes, sir.

Q. Do you know the reason of it?

253 A. The common repute in regard to it was that it created more or less silt and settlings in the ditches, and they ordered the laterals to be dug, so that they could conduct the water from the main ditch without any checks.

By the COURT:

Q. Just one moment. The checks that you have referred to as having been put into the Mesa canal in 1883, opposite to the Lewis ditch—do you know where the present check is?

A. Yes, sir.

Q. Have you seen the operation or the effect of the present check upon the Mesa canal?

A. Yes, sir.

Q. Judging comparatively between the two check—the one that

was put in the canal in 1883 and the present one—was there any difference in the raising of the water in the Mesa canal as to height?

A. Yes; the new one raises it higher by, perhaps, three feet in that part of the canal.

Q. With reference to the new Mesa canal and the old Lewis ditch—the comparison of the two as to carrying water—is that new ditch greater in capacity?

A. The new one is greater than the old.

By Judge POPE:

Q. You saw the check in the old Lewis ditch, did you?

A. Yes, sir; it was either a 12 or a 14 inch board.

By Mr. C. M. FRAZIER, of counsel for defendant:

254 Q. As to the bed of the Mesa canal below the division gate, is that the same one as it used to be?

A. It changes every year.

Q. Do you know whether it was raised or lowered?

A. The bed is lower now—probably three or four feet lower—because when we made the Lewis ditch we made it with a plow or go-devil, and now the Lewis ditch is 3 or 4 feet up.

By Judge STREET:

Q. What is the purpose of that?

A. To get it down to the bed of the canal in order to get water at all. We sunk the Mesa canal year after year, and we sunk it down every time; in fact, along to the old Ayers ditch. We dug it out and run it into the old Montezuma canal, and the old canal is some three or four feet of fresh digging there since we first made the canal.

Q. Can you tell us what has been the change, if any, in the Mesa canal between the old Lewis ditch and the Ayers head gate before the Consolidated canal was constructed, as to whether the bed had sunk or raised?

A. Where the Consolidated came down to the Mesa, they raised the bottom.

Q. From the old Ayers head gate to here (indicating upon the map), the old Lewis ditch, you say that along the bed of the old Lewis ditch in 1880 the bottom was all the time being sunk lower. Now, what about the rest of the canal?

A. It was sunk in the same proportion, so that we kept
255 *out* regular grade.

Q. So, how much lower was that portion of the canal in 1891, when the contract with Dr. Chandler was entered into, than it had been or was in 1881?

A. It was certainly 3 or 4 feet lower.

That is all.

Cross-examination:

By Judge POPE: Has it been lowered since 1891?
A. No, sir.

That is all.
Witness excused.

J. F. LEWIS, Esqr., a witness, being called, sworn according to law, and examined on behalf of defendant, testified as follows, to wit:

Examination by Judge STREET:

Q. You are a stockholder in the Mesa canal, are you?
A. Yes, sir.
Q. Are you acquainted with the old Lewis ditch?
A. Yes, sir.
Q. You have lived right there in that neighborhood?
A. Yes, sir.
Q. When was that built?
A. It was built in 1879.
Q. Are you an irrigator under that ditch?
256 A. Yes, sir.
Q. How long have you been irrigating lands under that ditch?
A. Ever since 1879.
Q. What was the purpose of that ditch?
A. To irrigate lands under it.
Q. Can you tell some of the people who owned the lands that were irrigated since the canal was built?
A. Yes, sir; some of them.
Q. At the time the canal was built, who were they?
A. Well, there was Charles Peterson, Warren Serrine, and myself, and several of us.
Q. State whether or not they were all owners of stock in the Mesa canal.
A. Yes, sir.
Q. And were irrigators from that canal?
A. Yes, sir.
Q. State whether they were irrigators also from the Lewis ditch.
A. Yes, sir.
Q. What lands did they irrigate collectively?
A. They irrigated in sections 24 and 25 and some in section 13.
Q. On what side of the Lewis ditch is that?
A. On the south side.
Q. Was there any irrigators living on the north side?
A. No, sir.
Q. State whether or not the Lewis ditch was so constructed that lands on the north side of that ditch could be irrigated by that.
257 A. No, sir; it was not.
Q. You are an irrigator under that ditch?

A. Yes, sir.

Q. On what lands do you irrigate?

A. Some in section 25 and some in 36.

Q. Do you know anything about the construction of the new Lewis ditch or the east Mesa canal ditch?

A. Yes, sir.

Q. Did you help to construct it?

A. Yes, sir.

Q. What was that constructed for?

A. For irrigation purposes.

Q. Who was that constructed by?

A. By the landholders under that ditch.

Q. State whether anybody else took a part in it except the owners of the Mesa canal.

A. They did not.

Q. What lands are now irrigated or can be irrigated by the new ditch?

A. There is no sections but what was touched by the old canal; but there is a piece in on section 30 that was not irrigated at all, but it is now irrigated by Mr. Wallace.

Q. Is Mr. Wallace a stockholder in the Mesa canal?

A. I believe so.

Q. Is there any one irrigating under the new ditch excepting the shareholders of the Mesa canal?

258 A. None that I know of.

Q. Will you explain to the court the necessity of the new ditch and why it was built?

A. I will start in with the old one. In coming down the Mesa canal had a fall to it, and it filled from year to year, so that we had to clean it out from one to three feet, and it wasn't practicable to irrigate any lands on sections 24, 35, and 36, and we worked along a while with Dr. Chandler, and we supposed that everything was agreeable when we made the ditch, but when it came to the contract we couldn't close it up with him, and we had to condemn a piece of land to make the ditch, and now we have no trouble in getting the water where we wanted it, but we couldn't before.

Q. Is that intended to take the place of the old ditch?

A. Yes, sir; to a certain extent. There is a ditch running down the center of section 14, and then there is another one going down between section 24 and 23. They are each continuing to use the old ditch, but from where it enters the section 13 it has no grade and it filled with water, and it is impractical to irrigate sections 24, 25, 30, and 36.

Q. State whether or not the new ditch runs into the old ditch at any point.

A. Yes; it runs into it on section 24.

Q. And where else?

A. On the township line here (indicating on the map).

Q. That is where the old ditch crosses the township line?

259 A. Yes, sir.

Q. And at those two points only?

A. Yes, sir; but there is a small lateral built out here and runs into it between section 19 and 30.

Q. What do you know about a check in the Mesa canal for the old Lewis ditch in times gone by?

A. Yes; we used to have one there in 1890.

Q. And what other years?

A. I think we had one there continually from that time on to the time——

Q. (Interruption.) Did you know anything of the check being there in the early 80's?

A. Yes; there was a check there some time, but it was abandoned. I couldn't tell about that.

Q. There is a fall of about 5 feet at the division gates from the Consolidated canal down to the Mesa canal, isn't there?

A. I wouldn't say that it was that much. I would think it was about 3½ feet.

Q. What sort of machinery has Dr. Chandler got in there?

A. At the present time there is no machinery in there, but there is a wheel there.

Q. What became of the machinery?

A. It has been removed.

Q. What sort of a wheel is it?

A. It is a feather wheel—a paddle wheel.

Q. Do you know what that is used for?

260 A. They have tried to use it for some time; I don't know whether they have succeeded or not; it was for rolling barley. We objected when they were trying to use it; they were trying to roll barley, but they were not having very good success, for they didn't have power enough.

Q. How much power was running through it at that time?

A. I judge there was from 3,000 to 4,000 inches of water.

Q. Was there any back water that was obstructing it at that time?

A. None that I noticed.

Q. Was there a check there at that time?

A. No, sir.

Q. I wish you would describe that machinery and tell us all about what it was doing.

A. Yes, sir.

Q. And whether it was doing any work at all or not, or whether it was only a structure.

A. When I saw it there was one small water wheel there, some 3½ to 4 feet long, and it was attached to a small barley-crusher. I think they was trying to crack the barley, and it was slipping—the machinery wasn't running, and I took hold of the belt and held it.

Q. How much water was going through it then?

A. Some 3,000 or 4,000 inches.

Q. And you took hold of the belt when it was going and stopped it?

A. Yes, sir.

261 Q. How much barley were they grinding there at that time?

A. I didn't stay there more than ½ to ¾ of an hour, and they didn't grind a sack while I was there.

Q. You have been connected with the Mesa canal for years, have you?

A. Yes, sir.

Q. And was there at the time Dr. Chandler was constructing the Consolidated canal?

A. Yes, sir.

Q. Was there anything said at any time about the use of any water power or machinery during the construction of that canal?

A. I never heard of any.

Q. And you frequently talked with Dr. Chandler and the Consolidated Canal people about the canal?

A. Yes; often.

Q. Are you acquainted with the west cross-cut and with the east cross-cut of the Consolidated canal?

A. Yes, sir.

Q. Where does that run to?

A. The west one runs to the Tempe canal.

Q. And the east one?

A. It runs in a southern direction and then turns south.

Q. For how many miles does it extend?

A. Some 15 or 16 miles.

Q. How many miles is the Tempe branch?

A. I judge it is about 2 miles.

262 Q. State whether or not those branches are used for any other purposes than for irrigation.

A. The western branch has not been used at all to speak of, but the eastern branch has been used successfully for irrigation.

Q. Do you know for what purpose those canals were constructed?

Plaintiffs object to the question as irrelevant.

By Judge STREET: I want to corroborate the agreement that this lateral is only for irrigation purposes, and that there was no question of a water power or of machinery ever contemplated by anybody in connection with it until we find this little piece of machinery coming down here.

By the COURT: Go ahead.

By Judge STREET: Well, I have gone far enough, I think.

Q. Do you know anything about the Ayers ditch?

A. Yes, sir.

Q. When did you know that ditch?

A. In 1890.

Q. When was that ditch dug?

A. It was dug in 1889, I think.

Q. Do you know what else it irrigated in here (indicating)?

A. It irrigated the north half of section 15 and some for Mr. Moote—that is, on section 15.

Q. Do you know the stake that is in the abandoned portion of the canal, there at the Ayers head gate?

A. No, sir.

That is all.

263 Cross-examination.

By Judge POPE:

Q. Do you know when the barley mill was started?

A. No, sir.

Q. At the time you were there was that the time it was started?

A. No, sir; it was running for some time then.

Q. Do you know how long it was running?

A. No, sir.

That is all.

Witness excused.

DR. E. W. WILBUR.

Examination by Judge STREET:

Q. You may state your name and residence.

A. My name is E. B. Wilbur and I reside at Mesa, in this county.

Q. Are you a stockholder in this Mesa canal?

A. Yes, sir.

Q. Do you know the old Lewis ditch?

A. Yes, sir.

Q. How long have you known it?

A. It is about 4½ years or a little over.

Q. Do you know the new east Mesa branch?

A. Yes, sir.

Q. When was that constructed?

A. I cannot give the dates, but it is within the last year, and I think it was about a year ago.

264 Q. Are you an irrigator under either one of these ditches?

A. Yes, sir.

Q. Where? Which one?

A. I did irrigate under the old ditch until it was abandoned.

Q. And what else?

A. My lands are in section 24.

Q. Will you describe to the court the operation of the faults of the old Lewis ditch? Describe its construction and wherein it failed to do its work, if that be the fact.

A. This is the diagram representing the old Lewis ditch as it was constructed first. Of course, the most of our lateral ditches are largely following the surface of the ground, but along down in here (indicating upon the map) there was some parts of it that had to be shoveled out and made deeper.

As we come down to this point there was a good fall and it went on down to there. That is where it leaves section 24. Further on down I would say it is a pretty good ditch, but from that point to

where it strikes section 13 it was a very bad ditch. That is what we call a push ditch; it wouldn't run only as it was crowded; it wouldn't take the water from the head, and during the seasons when there was a good deal of silt in the water it always settled along in there and every little while it would fill up.

We threw the silt out on the banks until we had raised the banks so high that one man couldn't throw the mud from the bottom of the ditch to the top of the banks, and then we had to have
265 two men to do it.

Q. How much of a ditch was the old one?

A. I think it was about 4 feet in width, and it varied in depth from 2 feet to perhaps some 3 or 4 feet in some places.

Q. And it was used in irrigating about how many sections of land?

A. I never counted it up to know, but it would approximately carry water enough to irrigate 2,000 acres of land.

Q. Who built the new ditch?

A. It was built by the farmers and ranchers living out under this old Lewis ditch largely. I think there was one or two parties interested in the new ditch that didn't use the water in the old ditch, but the most of them was those that used the water in the old ditch.

Q. How many were the owners in numbers that took part in the construction of the new ditch?

A. There was 20 or more.

Q. What was the purpose of building the new ditch?

A. It was to get a better ditch.

Q. How is it a better ditch?

A. It is of an uniform grade and has a better fall.

Q. What is the size of that ditch as compared with the size of the old ditch?

A. It is a little different shape. It had been in use so long that the banks were square down and up, while the new one has sloping banks. The new ditch will probably carry twice the amount of water that the old ditch would carry, and perhaps more.

266 Q. State whether or not that runs into the old ditch at any point.

A. The ditch that we have denominated as the east Mesa proper does not—that is, the part which was constructed by this company does not run into the old ditch, but there are laterals that were taken out of it that does.

Q. Since the new ditch has been constructed, has any portion of the old ditch been abandoned; and, if so, what part of it?

A. This part from where it strikes section 13 down has been abandoned, excepting such portion of it as was utilized by these laterals uninter-upted.

Q. Have any new lands been brought under the subjection by means of the new ditch?

A. Yes, sir.

Q. How many quarter sections?

A. It is only a small amount. I am watering 40 acres that nearly all of it couldn't have been watered from the old ditch.

Q. Who else or what else is watered by it?

A. I think Mr. Wallace is using water on those lands that couldn't have been irrigated from the other ditch.

Q. How much has he under that ditch?

A. Probably about a ¼ of a section.

Q. That is 200 acres, then; is that all?

A. There was other lands along in here that was being put into condition to take water, but I don't know as they have yet been watered from it.

267 Q. How far below the level of the Consolidated ditch is the bed of the new ditch?

A. We employed Mr. Coad to stake the stakes out for us and lay out the line of the new ditch, and it was our understanding that it was laid out on the same grade and probably on the same level as the east branch of the Consolidated canal; but in the construction as we came near to the head, there wasn't earth enough taken out to build up the banks, and it was built a little deeper at the head that it was staked out, so that it is probably 6 or 8 inches below it.

Q. What is the length of the canal—the new one?

A. It is 8 miles long.

Q. What is the length of the Consolidated Canal branch?

A. It is 15 or 16 miles or more.

Q. What becomes of the tail end or end of the new ditch or canal?

A. The water is taken out until it becomes exhausted or used up.

Q. That is, by the time it reaches what section?

A. I think some of it goes as far south as the first section below the base line, but not very much.

Q. On the township south?

A. Yes, sir. Four or five shares go down there.

Q. Then there is not enough water in that new canal, and it is not so constructed as to bring into subjection lands lying away to the south of that township upon which it is taken out?

A. No, sir.

268 Q. Do you know anything about the water power that Mr. Chandler has built there at the division gates?

A. I know that there has been a drop there into the old Mesa canal.

Q. Do you know anything about the machinery there?

A. Yes, sir; I have seen it.

Q. What is that machinery?

A. It starts from the water wheel that is hung at one of the three gates. I believe there are three gates opening into the Mesa—and this wheel is about 3½ or 3⅝ths feet in length—the water is conveyed through there, enough to fill one of those gates, and as the water comes out it strikes upon the paddles of this wheel and puts it in revolution. It has wide paddles.

Q. You were a director of the Mesa Canal Company at one time, were you?

A. Yes, sir.

Q. In what year was that?

A. I was a director for three years—1892, 1893, 1894, till 1895.

Q. Did you have any talk as a director about the digging of the new ditch and about that machinery that was there and matters that was connected with the division gates, with Dr. Chandler?

A. Yes, sir.

Q. What was that talk?

A. It is difficult to recall it, but there was more or less controversy with reference to this placing of the machinery in the canal with all of the directors and with Dr. Chandler.

269 Q. Did the canal company raise any objection to it?

A. Yes; we asked him to take it out, and we finally brought suit against him to compel him to take it out of the canal.

Q. How soon did the directors take steps to have that machinery removed from that canal or to object to its remaining there after it was put there?

A. Immediately.

Q. State whether or not before it was put there they had any knowledge of its going there.

A. No, sir; not so far as I know.

By Judge POPE: We will admit on behalf of the plaintiff that we didn't ask leave to put it there.

By Judge STREET:

Q. Where is that machinery now?

A. The water wheel is there still.

Q. Where is the other part of it?

A. The barley-crusher has been removed. I think the rest of it is there.

Q. When was that removed?

A. I don't know.

Q. How soon was it after the machine was put in there that you put in the check for the new canal?

A. It must have been some months. In the first place, we had to get a right of way across the doctor's ground to build the ditch, and we didn't put in the check until we were prepared to run the water.

270 Q. Did you get a right of way from the doctor?

A. No, sir; but we obtained one through legal proceedings against him.

Q. That was for the head of the new ditch?

A. Yes, sir.

Q. From whom was that right of way obtained?

A. From Dr. Chandler.

By Judge POPE: We admit that on the part of plaintiff.

By Judge STREET:

Q. How does he stand with relation to the Consolidated Canal Company, the plaintiff in this suit?

A. He is the president of that company.

That is all.

Cross-examination.

By Judge POPE:

Q. How long have you been a stockholder in the Mesa Canal Company?

A. Ever since I came to the Territory, which, I think, was in 1892.

Q. That is when you came here?

A. Yes, sir.

Q. When did you commence irrigating from the Lewis ditch?

A. Right away.

Q. You are the principal promoter of this new ditch scheme, are you not?

A. No, sir.

Q. Don't you think you are the master spirit in that enterprise?

271 A. No, sir; there are quite a good many of us.

Q. And you wanted to irrigate some land that wasn't under the old ditch?

A. No, sir; not at that time.

Q. Then you have conceived the idea since that time?

A. I purchased some land since that time that I didn't own then.

Q. And these were all lands lying under the line of the east branch of the Consolidated canal?

A. Yes, sir.

That is all.

Witness excused.

J. W. LE BARON, a witness, being duly called, sworn according to law, was examined upon his corporal oath, and testified as follows, to wit:

Examination by Judge WEBSTER STREET:

Q. What is your name and where do you reside?

A. I live at Mesa and my name is W. J. Le Baron.

Q. Are you the secretary of the Mesa Canal Company?

A. Yes, sir.

Q. How long have you been its secretary?

A. Since March of the present year.

Q. Were you secretary at any time prior to this year?

A. Yes, sir.

Q. In what years?

A. I was secretary of the company in March and April, 1889,

272 and till 1891—2 years.

Q. Were you secretary of that company at the time the agreement with Dr. Chandler was entered into by the Mesa Canal Company?

A. Yes, sir—that is, the original agreement.
Q. Turn to your minutes. You have your minutes with you?
A. Yes, sir.
Q. Turn to the minutes with reference to the action of the stockholders at the time the original agreement was entered into by the Mesa Canal people with Dr. Chandler.
A. Yes, sir; I have it here.
Q. What is the date of that meeting?
A. It is December 14th, 1889.

Defendants offer these minutes in evidence, and will ask to have it read.

By Judge POPE: Let us see it before it is read to the court. (Witness hands book to counsel for plaintiff.) What is the object of this?
By Judge STREET: It is to show the authorization of the agreement.
By Judge POPE: We concede it.
By Judge STREET: But we want to show by what vote and the strength of the majority vote.
By Judge POPE: Plaintiff concedes the vote.
By Judge AINSWORTH: The first contract sets it out in full.
By Judge STREET: Very well. So long as it is admitted you need not read it, but I will ask to have that entry on page
273 321, under date of December 14th, 1889, admitted in evidence.
Plaintiff objects to its introduction for the reason that it is immaterial.
By the COURT: Yes, I think that is all unnecessary. It is useless to admit it to establish a proposition which is admitted by the plaintiff.
Plaintiff objected. Objection sustained and defendant excepted to the ruling of the court.

By Judge STREET: Turn to the minutes of the stockholders' meeting at the time of the signing of the new contract in 1891.
A. I have it, sir.
Q. What is the date of that?
A. That was on January 10th, 1891.
By Judge POPE: Let us see that, please. We don't see what it is offered for, and we would like to have the counsel state.
By Judge STREET: This is the one on page 344. This is to show the action of the stockholders in reference to the contract and authorizing it to be entered into, and to show the vote of 221 shares in favor of it and 30 shares opposing the vote.
Plaintiffs admit that the stockholders by a majority voted as recorded, and we will concede that it is a correct vote.
By the COURT: Very well. With that admission, it is useless to encumber the record.
By Judge STREET: Very well. State whether the stockholders of

the Mesa Canal Company or the board of directors took any
274 action in regard to the building of the Consolidated canal by Dr. Chandler and his associates below the Ayers head gate.

A. There are minutes in reference to those points; yes, sir.

Q. Can you find them?

A. Yes, sir; in the minutes of April 13th, 1894, you will find it.

Q. Very well, we will offer that in evidence.

Plaintiffs cannot see the relevancy of the offer. When was the Consolidated canal built down to the division gates? That was in 1890 or 1891. We cannot see what the authority of 1894 would have to do with that. This is the time they wanted to get that underhold on us in this new ditch.

By the COURT: I will let it in. The objection will be overruled.

Plaintiff excepts to the ruling of the court.

By Judge STREET: You may read that portion in relation to the canal company:

A. "Directors' meeting, held on April 13th, 1894. Present: Moote, Christman, Trippel, Wilbur, and Zanjeiro Lewis.

On motion, Moote was elected chairman *pro tem.* The minutes of the last meeting were read and approved. The opinion of Messrs. Millay & Bennett, attorneys, which had been asked for by the secretary, under the instructions of the board of directors, as to certain questions with reference to the delivery of water for the stockholders by the Mesa Canal Company, and also as to the extend-
ing of rights to the Consolidated Canal Company to that por-
275 tion of the main canal which is between the Ayers head gate and the present division gates, which was read and discussed at length; and, on motion, the secretary was instructed to have the attorneys prepare a notice to be served upon the Consolidated Canal Company notifying that company that the Mesa Canal Company had never surrendered any right to that portion of the canal and that the Consolidated Canal Company were trespassing upon the property of the Mesa Canal Company, and that the Mesa Canal Company claimed and should maintain exclusive right of that portion of the canal and to the exclusive management of it, all voting aye."

Plaintiff objects to the introduction of the evidence on the ground that it is immaterial and irrelevant.

Objection overruled. Same duly admitted in evidence.

Plaintiff except- to the ruling of the court.

By Judge STREET:

Q. State whether the minutes shows that prior to that time any consent had been obtained from the stockholders or the directors by Dr. Chandler or his associates to build the Consolidated canal below the Ayers head gate point.

A. No, sir.

Q. And you have hunted the minutes through so as to be able to state that there is no consent of the kind in them?

A. Yes, sir; there is nothing concerning it in here.

Q. State what other minutes there are with reference to the Consolidated canal below the Ayers head gate.

276 A. The matter was brought up at the meeting held on July 5th, 1894, and it was brought up a time or two before that, but it simply has a reference to it. There is no reference to the motion for suit, but on the 5th of July, 1894, we find the record of the meeting and the order to bring the action, and a copy of the notice was served.

Q. That was in 1894?

A. Yes, sir; on July 5th, 1894.

Q. State what the minutes show, if anything, with reference to the grist-mill that was put in there by Dr. Chandler at the division gates.

A. Yes; I have it. On page 414 of this record of the minutes of the meetings of the Mesa Canal Company of date May 8th, 1895. The matter was brought up on April 22nd also.

Q. Was there any other before that?

A. I don't see any mention of it. It refers to the obstruction of the ditch and the action being brought in the district court.

Defendants offer the minutes of the meetings of April 22nd and April 23rd in evidence.

Plaintiffs don't see the materiality but are willing that they should go in as evidence.

By the COURT: Very well, they may be admitted.

By Judge STREET: You may just read them in evidence.

A. (Witness reading from minute book.) From page 413, the record of the directors' meeting April 22nd, 1895. "The secretary stated that the meeting had been called at the instance of Dr. Chandler, who was present, to see if by trying once more we could come

277 to some understanding which would obviate the necessity of going into court with an action. The matter was discussed at length, but after figuring it resulted only in a great waste of words, and on motion the meeting adjourned."

Q. What matter is related to in that other meeting?

A. It is the matter of the obstruction of the canal. I will find the other portion of it.

Q. Read that record of the meeting on April 23rd.

A. "An adjourned directors' meeting. The matter of the differences between the Mesa and the Consolidated Canal Companies was taken up and discussed until noon. The board met after dinner and ordered the secretary, etc., and it was agreed that the Mesa Canal Company should execute a contract with the Consolidated Canal Company on the basis of the old contract."

By Judge POPE: Why don't you read all of it?

A. It is in reference to the contract, that is all.

By Judge STREET: State whether this has reference to the canal or to water.

A. This is a continuation of another matter (examining the record). This matter was on April 22nd and was in regard to a matter that

was brought against the Consolidated canal on account of the obstruction by the water wheel.

Q. What does that record of the meeting on April 23rd relate to?

A. That relates to the matter of drawing up a supplemental contract for that portion of the canal lying between Ayers head
278 gate and the division gates.

Q. Read that.

A. "And on further discussion of the contract question, it was agreed that the Mesa Canal Company would execute a contract with the Consolidated Canal Company upon the basis of the old contract, but that the clause binding the Consolidated Canal Company to deliver the water to these shareholders of the Mesa Canal Company should be made to require it at the division gates or just below, at the same level as the division gates, and granting to the Consolidated Canal Company the benefit of the waterfall for all of the water passing below this point."

"Mr. Surrine and Mr. Wilbur were appointed a committee to see Mr. Chandler and make him this proposition, and if he refused, then they were to act as the committee should say about the putting in of the check below the division gate, so as to raise the water above the level for the stockholders desiring to conduct water at such point."

Q. Is that all?

A. Yes, sir.

Q. Now state whether the minutes show whether any agreement was entered into between Dr. Chandler, the Consolidated Canal Company, and the Mesa Canal Company pursuant to those minutes as you have read.

A. No, sir.

Q. Then, so far as any action has been taken by the Mesa Canal Company, no agreement has been entered into granting any
279 rights to Dr. Chandler or the Consolidated Canal Company below the Ayers head gate?

A. No, sir; not that I am aware of.

Q. Have you searched the minutes of the company so as to be able to state that there are nothing in it to that effect?

A. Yes, sir; and I have answered that there has been nothing.

Q. Who were the members of the directory during the years that the Consolidated canal was being constructed?

A. William N. Standage, —— Newell, —— Christman, W. J. Le Baron, and Charles Peterson.

Q. Are you the W. J. Le Baron mentioned?

A. I am.

Q. State what action, if any, the directory took about the construction of the canal below the Ayers head gate, if they ever took any.

A. No, sir; they did not take any action.

Q. What do you know, if anything, about the pretests that were made to Dr. Chandler or to the Consolidated Canal Company in the building of the canal below the Ayers head gate?

A. There was no protests made as a board or company during

the year that the canal was constructed, but the matter was brought up and discussed, but no action was taken.

Q. What individual protests were made by the stockholders or the directors?

A. There was a good many individual protests.

Q. By all classes of people?

280 A. Yes, sir; by a class of stockholders in the Mesa canal who were the old original owners and the builders of the canal in the company.

Q. To what extent of the vote?

Plaintiffs object to the question unless it is made more definite—Was it made to Dr. Chandler?

By Judge STREET:

Q. To what extent of the vote?

Plaintiffs interpose the same objection.

A. I don't know as I understand that question.

Q. While the construction of a portion of the Consolidated canal was going on below the Ayers head gate what was the extent of the protests by the stockholders as to the construction of that canal below the Ayers head gate?

A. I am not able to answer that question.

Q. State whether or not there was any protests made.

A. Yes, sir.

Q. And they were made by whom? I mean were they made by the stockholders or by the directors?

A. Yes; they were made by the stockholders and by the directors.

Q. How were they made?

A. In conversation.

Q. To whom were they made?

A. To the directors of the company.

Q. Did the stockholders protest to the directors of the company?

A. Yes, sir; but after that portion was being built they had 281 an understanding.

Q. Now, then, how many directors gave their direct consent to Dr. Chandler to construct that canal in the manner in which it was constructed?

A. None that I know of.

Q. How many gave their permissive consent or acquiesced in it?

A. It seems the entire board did.

Q. And that was while the stockholders were protesting, was it?

A. They were protesting no more than others in particular, owing to the work being done without an understanding.

By the COURT:

Q. And on that there was a divided house?

A. Yes, sir; the stockholders didn't want the work done without an understanding.

Q. And they were divided upon that question?
A. Well, no, sir; they couldn't help it.

By Judge STREET:

Q. The entire board allowed it to be done in spite of the stockholders' protests, didn't they?
A. Yes, sir.
Q. What was the ground of the objection that was being made by the stockholders?

Plaintiffs object to the question. Objection overruled.

A. Not knowing what the results would be in regard to the management and control of that portion of the canal, and whether it was to be in the hands of the Mesa Canal Company or not.

282 Q. Have you had any conversation with Dr. Chandler about the new ditch?
A. I cannot say positively. I don't remember.
Q. Did you have any talk with him in which he said that he would have no objection if they would come to some understanding about the lands to be irrigated?

By Judge POPE: That question implies that there was a discussion of it.

A. I am not positive, but I have talked with the Dr. a good many times in relation to all of these matters.

That is all.

Cross-examination.

By Judge POPE:

Q. That contract authorized in the resolution was not executed, was it?
A. Yes, sir.
Q. I guess you misunderstood me.
A. What contract do you refer to?
Q. The one that you didn't want to read about awhile ago, where Dr. Wilbur was authorized to make a supplemental contract.
A. That wasn't executed.
Q. Do you know why it was not done?
A. I wasn't in the board then. I think the minutes may refer to it and give the reasons.
Q. That is, at some subsequent meeting?
A. Yes; it was at some meeting, I think.

283 Q. And there is no minutes showing that the contract was ever executed?
A. No, sir.

That is all.
Defendant withdraws the former question in relation to that

matter. It was a talk about the compromise and it was never carried out.

That is all.

Witness excused.

W. H. WALLACE, Esqr., a witness duly called, sworn according to law, and examined on behalf of the defendants, testified as follows, to wit:

Examination by Judge STREET:

Q. Are you a stockholder in the Mesa Canal Company?

A. Yes, sir.

Q. Do you know the Lewis ditch?

A. Yes, sir.

Q. That is, I mean the old ditch?

A. Yes, sir.

Q. Are you irrigating under the new ditch now?

A. Yes, sir.

Q. Which land are you irrigating under that ditch?

A. It is a portion of section 19.

Q. State whether you took a part in the construction of the new ditch.

284 A. Yes, sir.

Q. What was the purpose of that ditch?

A. It was to have a ditch that would carry more water than the old one and to get a better grade.

Q. What is the size of it?

A. It is 8 feet in the head in the bottom, and running down about a mile it drops down to 6 feet, and then on down about ½ a mile it drops down to 5 feet on the bottom.

Q. What is the depth?

A. At the head it is one foot below the surface—that is, one foot below the surface of the ground, but we leveled up the banks some.

Q. Do you know how far the floor of the head is below the floor of the division gates?

A. They have 50 feet from the center of the right of way, and then we have 20 feet of ours—that is, ½ of 100 is 50 and ½ of 40 is 20. That makes 70 feet.

Q. You obtained that right of way by condemnation proceedings in this court, did you?

A. Yes, sir.

Q. Against whom were those proceedings brought?

A. Against Dr. Chandler, for the right of way across his property.

Q. That was for what portion of the canal?

A. It was for the right of way on the land, on the portion belonging to Dr. Chandler, from the division gates east to the line of his property in section 14 as far as he goes east. He has a ¼ 285 section of land there, but it only runs to the center line.

Q. Then you have the right of way from the east line of section 14 to the division gates?

A. Yes, sir.

Q. Covering over how many feet in length?

A. From the center of his land it is about 540 feet.

Q. State whether or not you had any talk with Dr. Chandler about the construction of the canal before it was constructed.

A. Yes, sir; often. We often wanted to make this ditch out there. The old Lewis ditch didn't cover but little of my land. It crossed the corner of section 19, and I wanted the ditch built up there so that I could cover all of my land lying under his ditch.

When I first bought the land—Dr. Chandler urged me in the first place to go and buy the land, and I went over with him in the buggy, and he took me to the division gate and showed me there that he could take out the water on that the same as he did on the other side. This is the first year that he had water for all of his, and he showed me that I could take the water out on my place and my land would be as valuable as his or any other land in that neighborhood.

At that time his was a dry ditch, but after a while it would be better than the Mesa water, and he said to me that I could use that in preference to the Mesa water if I preferred.

Q. What did he say about taking the water out of the
286 division gates?

A. He spoke of doing it, but we couldn't get him to do it, so we finally urged the Lewis ditch people to come in with us and construct this ditch.

Q. Have you had any talk with him since that time?

A. Yes; we went to work thinking everything was all right. He had promised to give us the right of way, but we wanted to get the contract signed up. We got the tools from him to do the work with, and afterwards the contract that he would sign was a contract that we wouldn't sign, and so we wouldn't go into the agreement at all.

So about the time we finished the ditch he had sent teams out there to throw in two dams into the ditch, showing us that he didn't intend that we should run water into it. There was one thrown in at the east line of his land and the other one was in the new ditch.

Q. Before the ditch was then completed he knew of your building the ditch?

A. Yes, sir.

Q. You say that he furnished the tools with which to do that work?

A. Yes, sir.

Q. And it was understood between him and you that you were going to build the ditch?

A. Yes, sir.

Q. But after the ditch was completed he offered you a con-
287 tract that you declined to sign?

A. Yes, sir.

Q. When I say "you" I mean all of these people interested.

A. Yes, sir; I understand.

Q. And then he put the two dams into the ditch?

A. Yes, sir.

Q. How soon after that and at what time with reference to that was it that he put in the water power?

A. It was a few days, I think, perhaps the next day after he throwed in the dams. The men came down and notified me of his putting in the dam; I think the next night it was that they put in the water wheel.

Q. And that was the first time that you ever heard of the grist-mill being there?

A. Yes, sir.

Q. And that was after he had put in the dam, and then you wouldn't sign the contract, and then he put in the grist-mill?

A. Yes, sir.

Q. What took place by way of talk? What did the Doctor say about the canal as to his objections to your using it?

A. Well, when we went to him in the morning—we had got the tools—he took us into a private room and asked us what we wanted. We said that we wanted the right of way over his land, and then he asked Dr. Wilbur and he told him what we wanted, and Wilbur told him that we wanted to build the ditch parallelling his ditch down to the east line of section 24, and he stated that we
288 wanted to use the water on section 19 and on other lands below there. He didn't claim that we wanted to stop the ditch there, but we wanted to use the water wherever we pleased. He said that he didn't see anything in the way, and that he would give us the right of way, and he said that he had a friend there that wanted to ride out, and he said that in about an hour he would be at the division gate and sign up the contract. We went out there and waited there until noon, but the Dr. wasn't there, and along about three days after that he sent out this contract that we wouldn't sign.

Q. Was that about the water delivery or about the right of way?

A. It was about the right of way.

Q. And it was then that you came into the court and got your right of way?

A. Yes, sir.

Q. What did Dr. Chandler say about your using the ditch or about his willingness or unwillingness to have you use it?

A. At that time he seemed perfectly willing, and he urged no objection that morning at all.

Q. That canal is constructed for what purpose?

A. For the purposes of irrigation.

Q. And who was it constructed by—what class of people?

A. They were the farmers in the neighborhood that owned stock in the old Mesa ditch.

Q. State whether or not there was any irrigators in the new that were not irrigators in the old ditch.

289 A. I have a small portion under the old ditch, but I had irrigated the land and am irrigating through the east branch of Dr. Chandler's ditch. He had offered to carry our water, but he

asked us more than we thought we could afford to pay. We did try it, however, but we found there was too much waste to the water.

Q. And this lawsuit is as to whether this land down in here (indicating upon the map) shall be irrigated by the Mesa Canal water or by the Consolidated Canal water, isn't it?

By Judge POPE:

Q. What is that?

By Judge STREET: Perhaps that is rather suggestive. You need not answer that.

Q. He offered to let you take the Mesa Canal water from the east branch, did he?

A. Yes, sir.

Q. Let me call your attention more directly. Is it a fact that Dr. Chandler said that he would have no objection to your using this new canal providing you could agree upon what lands the water was to be put upon?

A. Yes, sir.

Q. State all about that.

A. He said that we could make use of that new canal provided we wouldn't carry it on down to new lands; but at different times he urged that I should not use the water, but offered for a compromise to run the water on the grade of two feet to the mile from the division gate—to let us run the water through this ditch—
but to run the water in the laterals down to where the
290 grade of two feet to the mile in the ditch would come, but below that our water was not supposed to parallel his ditch.

Q. When you say that he offered to allow you to use the water if you would agree not to carry it in down to the new lands, what point have you reference to, beyond which you were not to carry it?

A. Beyond the end of the ditch—the line of section 19.

Q. What was said as to what height he would let you have it in the Consolidated canal if you would enter into that agreement?

A. He would let us have it at a height of 8 inches above the floor in the division gates.

That is all.

Cross-examination.

By Judge POPE:

Q. He would let you have it at a point 8 inches above the floor of the division gates?

A. Yes, sir.

Q. And the right of way that he was to give you was to be by a written contract, was it?

A. We supposed so.

Q. And when that contract was brought up the way he wanted it you wouldn't sign it?

A. No, sir.

Q. And you didn't get the right to use it by contract, but afterwards condemned it?

A. Yes, sir.

291 Q. How long have you been a stockholder in the Mesa canal?

A. About a year and a half or two years, nearly.

That is all.

By Judge STREET: That is all.

Witness excused.

Mr. Jos. A. STEWART, a witness duly called, sworn according to law, and examined on behalf of the defendants, testified as follows, to wit:

Examination by Judge STREET:

Q. You are a director in the Mesa Canal Company?

A. Yes, sir.

Q. How long have you been so?

A. Since February, 1895.

Q. You reside over there near Mesa?

A. Yes, sir.

Q. And you are acquainted with the new and the old Mesa ditch?

A. Yes, sir.

Q. State what Dr. Chandler has offered to the directors of the Mesa Canal Company. State what he has said to the directors about using the new Lewis ditch, as to the height that he would allow you to take the water from the Consolidated canal.

A. Do you mean that question as regarding the height of the water?

A. Yes, sir.

A. I believe that he offered to furnish us the water at 8

292 inches above the floor of the division gates.

Q. Was that after or before the canal was constructed?

A. I think it was before.

Q. Upon what conditions was that to be done?

A. The conditions, I believe, was that he was to have the privilege of the water power.

Q. What has been said, if anything, since the construction of the canal as regards that question?

A. There has been a great many things said for and against it.

Q. I am speaking about Dr. Chandler and yourselves and what talk the directors of the canal company have had with Dr. Chandler about that since the construction of it and about the height at which he would allow you to use the water.

A. Well, he has asked us for a contract to that effect, I believe.

Q. When he was asking you that did the directors ever enter into an agreement with him giving him the consent of your company to use the water power?

A. No, sir.

By the COURT:

Q. Was anything said?
A. No answer.

By Judge STREET:

Q. Then the proposition that he made to the directors to use this as a water power never was agreed to or consented to by the board of directors?
A. No, sir; only in a verbal manner.
Q. By whom verbally, if at all?
293 A. By a portion of the directors, on conditions.
Q. Did the directors as a board ever enter into an agreement?
A. Only on conditions.
Q. Did the board as a board ever enter into any agreement with him?
A. No, sir; not a full board.
Q. Then this talk was only by some individual members of the board?
A. Yes, sir; that is all.

That is all.

Cross-examination.

By Judge POPE:

Q. Do you say that Dr. Chandler proposed to allow you to use that east ditch and give you the water at a height of 8 inches above the floor of the division gate?
A. Yes, sir.
Q. On condition that the water power should not be obstructed, and that he should have use of the water power?
A. Well, it all hinged on the rights to this half mile of the canal, in the first place, that was in dispute, and it was continually coming up before the board.
Q. That is not the question.

Defendants object to the question. Objection overruled.

Q. Answer the question.
A. The question came up in the stockholders' meeting, and the directors arranged so that this matter would be settled be-
294 tween the stockholders and Dr. Chandler. Dr. Chandler met with the board of directors, and they had several meetings in regard to settling this matter, and after talking the matter over we came to the conclusion that a portion of the board would go up to the head gate and look the matter over under the direction of a surveyor.

Mr. Coad run the survey out on the land and we finally agreed that we would execute a contract, taking the water at a height of 8 inches above the floor of the division gate, providing that he would give us —; that is, we would give him the portion

lying between the division gate and Ayers' head gate, and we was to have all of the rights and privileges which we were having under the contract, provided we executed the contract with Dr. Chandler, and we was to give him the right to use this water power, providing he would give us this water 8 inches above the floor of the division gate on either side of the canal—that is, going around by the Lewis ditch and also around by the Ayers tract.

That is all.

Cross-examination continued:

By Judge POPE: I want to ask another question.

Q. You have been telling us about the offer of compromise between Dr. Chandler and the company?

A. Yes, sir.

Q. All this talk that you have given us is in reference to the discussion between you and the Mesa people and Dr. Chandler
295 and the compromise between you?

A. Yes, sir.

Q. Well, that is all improper, and we object to it.

By Judge STREET:

Q. I want to know whether that was communicated to Dr. Chandler or not.

A. Yes, sir; this was between us and Dr. Chandler.

By Judge POPE:

Q. You spoke a while ago about Dr. Chandler proposing to allow the Mesa people to use the east ditch and to deliver them water at the height of 8 inches elevation above the floor of the division gate. Now, I want to know if that water wasn't to be delivered by means of a flume, so as not to destroy the waterfall.

A. That wasn't determined, as to how it was to be delivered.

Q. You said a while ago that Dr. Chandler proposed to deliver your water into the east ditch at 8 inches above the floor of the division gate. Wasn't that to be delivered to them by a flume and not be damming up the water and obstructing the waterfall?

A. I don't think it was understood at all that way.

By the COURT: Was anything said?

A. There was nothing said about that.

By Judge POPE:

Q. He was to deliver it, wasn't he?

A. Yes, sir; that was the idea, but there was nothing said about flowing the water under ground. We was to take the water
296 at that level.

Q. Didn't you say, deliver it to you, a while ago? Now you say, take it.

A. Well, I might have said deliver or take it, but we was estimating the height of the water.

Q. And nothing was said about the water, whether it was to be flumed or not?

A. No, sir.

That is all.

By Judge STREET:

Q. Who of the directors were present at this time?

A. I think it was Mr. Moote, Mr. Serrine, and Mr. Christman.

That is all.

Witness excused.

W. L. SERRINE, Esqr., a witness duly called, sworn according to law, and examined upon his corporal oath on behalf of the defendants, testified as follows, to wit:

Examination by Judge STREET:

Q. What is your name and where do you live?

A. My name is W. L. Serrine, and I reside at Mesa.

Q. Are you acquainted with the Mesa canal, and also the Consolidated canal, mentioned in this suit?

A. Yes, sir.

Q. You were one of the members of the directors of the
297 Mesa Canal Company, are you not?

A. Yes, sir.

Q. Since when were you a member of the board of directors of that company?

A. Since about two years ago.

Q. Are you acquainted with the old Lewis and the new Lewis ditch?

A. Yes, sir.

Q. State whether or not the directors, before the new Lewis ditch was completed, at any time talked with Dr. Chandler about the construction of that ditch.

A. No; not that I know of.

Q. Tell us what the talk was, if there was any.

A. It was simply with reference to the height of the water that was to be taken or delivered.

Q. You don't know anything about any talk with the directors and Dr. Chandler before the construction of the canal?

A. Well, yes; there was talk between a part of the directors and Dr. Chandler, but I am of the opinion that it was after.

Q. Did you take any part in the talk after the completion, or at any time, before or after?

A. Yes; I was there with Moote, and Stewart, and Christman.

Q. When was that?

A. It was somewhere near that time. We went over this Ayers tract of ground from the division gates down to the Ayers tract, to see where the water would go, and Dr. Chandler proposed to give us the privilege of taking the water from the division gates
298 at a height of 8 inches above the floor of the division gates, providing we would give him the use of the water power, and

we could take the water on either side of the canal—of the Mesa canal—that we wanted to.

Q. Did the board of directors agree to do that or to enter into such an arrangement with him?

A. No, sir.

Q. You are acquainted with the old Ayers ditch, are you?

A. Yes, sir.

Q. How many years have you been acquainted with that?

A. Ever since it was built.

Q. Do you know the stake that has been talked about by the witnesses here, and especially by Mr. Coad?

A. Yes, sir. I went with Mr. Coad and Mr. Christman. We were appointed a committee to go with the engineer and find at what level the water could be taken out of the Ayers ditch. Mr. Christman, on account of sickness, couldn't go over there, and so Mr. Coad and Dr. Trippell and C. B. Lewis went with me, and we undertook to find where the high-water mark was when the Ayers tract was irrigated, but the water afterwards had been raised by the dredger, and it was impossible to find exactly where the high-water mark was in the old Mesa canal, but we went to work as best we could to determine where the water stood, and we decided where it was, and we drove a stake there, and I have been to the stake since. Of course the water had been a great deal higher than that—higher than where we drove this stake.

299 Q. How far below the top of the banks was that stake?

A. I don't know, but I suppose they were from 14 to 18 inches.

Q. You say that the water had been a great deal higher than the top of the stake?

A. Yes, sir.

Q. How much higher?

A. From 14 to 18 inches.

Q. State whether you have ever seen the water higher than that stake.

A. I don't know that I ever did.

Q. Then you are speaking of the evidences of the water being higher than that stake?

A. Yes, sir.

Q. State to what height of the bank the evidences exist of the water being higher than the top of the stake.

A. You could see by the banks that the water had been within a very few inches of the top of the bank.

Q. Do you know to what extent or for what purposes the Ayers ditch was used?

A. Yes, sir.

Q. Tell us all about what you know—when, who used it, and what for it was used.

A. I couldn't tell exactly the time it was built, but I was there a short time after it was completed, and I was through this tract while it was being irrigated. I have seen the water running from the Mesa canal and flooding this tract.

300 Q. That is what land?

A. That is the north half of section 15.

Q. State whether it always flooded the north half of section 15.

A. No, sir; there was a few places that was a few inches higher than the others; it didn't flood all of it, but the greater portion of it was flooded.

Q. State whether there was any distinct corner or portion of it that wasn't flooded, or whether it was just a few little knolls of ground—not over a foot or so.

A. There was no corner but what was flooded.

Q. It was simply little knolls that were all through the surface that wasn't covered?

A. Yes, sir; the bigger part of it was flooded.

Q. How many times did you see that condition existing?

A. I may not have seen it like that more than once, but one day I put in 3 or 4 hours over that ground. I was a witness on proving up of the land.

Q. That was a desert entry of that land, was it?

A. Yes, sir.

Q. Do you know anything about Mr. Moote irrigating anything through the Ayers ditch?

A. Yes; I know that he did.

Q. Do you know how much he irrigated?

A. No, sir.

Q. At the time that you say you saw the water was running from that Ayers ditch and irrigating the north half of section 15,

301 where was the water level in the Mesa canal at the Ayers head gate and above it?

A. I cannot say that I was at the Ayers head gate when the irrigation was going on.

Q. Then you don't know how high the water was in the Mesa canal?

A. No, sir.

Q. What year was that?

A. I am not certain, but I think it was in 1890.

Q. About when was it, before the construction of the Consolidated canal?

A. I think that was about the time.

Q. What do you know of the ancient check at the old Lewis ditch?

A. I know that in the early days there was a number of checks put in there in a number of different places.

Q. Do you know whether there was one at that particular place or not?

A. Yes, sir.

Q. Do you know how many years it remained there?

A. I do not.

Q. Do you know to what extent the bed of the Mesa canal from the old Lewis ditch to the Ayers head gate was lowered before the construction of the Consolidated canal?

A. I would think it was from 2 to 3 feet.

Q. How did it happen?

Q. We lowered it at one time by scraping the dirt out one foot, and in every season in cleaning we lowered it more or less.

302 Q. Were you acquainted with the Mesa canal at the time of its construction?

A. Yes, sir.

Q. What year was that constructed?

A. It was in 1878.

Q. And you then knew where the bottom of the canal was?

A. Yes, sir.

Q. And you knew where it was in 1891, before the construction of the Consolidated canal?

A. Yes, sir.

Q. What do you know, if anything, about the protests and the opposition that Dr. Chandler met with in constructing the Consolidated canal from the Ayers head gate down to the division gates, as adduced by the stockholders of the Mesa Canal Company?

A. I don't know of any objections that he met with, with the exceptions of some stockholders objecting to his getting that done without a contract for every piece of the canal.

Q. Then there was no contract for that piece of the canal?

A. No, sir.

That is all.

Cross-examination.

By Judge POPE:

Q. You say that some of the stockholders objected except would do it upon the execution of a supplemental contract; do you know of any objections having been made to Dr. Chandler?

A. No, sir; but I have heard a few of the stockholders, in

303 talking among themselves, objecting to his coming down there without a contract.

Q. Were you one of the committee appointed by the board of directors of the Mesa Canal Company to fix the high-water mark at the Ayers head gate?

A. Yes, sir.

Q. And you had an engineer along with you at that time?

A. Yes, sir.

Q. Who was the engineer?

A. It was Mr. Alexander Trippell.

Q. You fixed upon a point and you drove down the stake as indicating the high-water mark?

A. Yes, sir; I was there at the time it was driven.

Q. And the engineer of the Consolidated canal was there also?

A. Yes, sir.

Q. And you agreed upon that point and drove the stake down to fit the point agreed upon?

A. The committee with myself did, but Christman wasn't there.

Q. But the Consolidated Canal engineer and the engineer for the Mesa Canal Company was there?

A. Yes, sir.
Q. And you fixed that point and drove that stake?
A. Yes, sir.
Q. Did you state that the board of directors didn't agree to Mr. Chandler's compromise?
A. Yes, sir.
304 Q. Were you not here when the minutes were read a while ago to the effect that they did agree to it, and Dr. Wilbur, too?
A. Yes; but that was a different contract.
Q. It was a contract that was to be given providing for the delivery of the water at an elevation of 8 inches above the division gate, and that Dr. Chandler was to have the use of the water power. That is the contract that they were talking about the execution of, wasn't it?
A. There was no such contract signed.
Q. But it was agreed to so far as the board could do it, wasn't it?
A. I think that the board did pass a resolution something to that effect.

That is all.

Redirect examination.

By Judge STREET:

Q. The contract that the witness was talking about is with respect to that part of the canal between the division gate and the Ayers head gate?
By Judge POPE: No, sir. This was an agreement authorizing that, but it wasn't ever executed.
A. That is so.

By the COURT:

Q. What about those lands under the Ayers ditch; do you know anything about their being cultivated?
A. No, sir. When Dr. Chandler, instead of going to the
305 Ayers head gate, as the contract said he should do, came on and left that and went further east, consequently he never complied with that, and this Ayers land couldn't be irrigated. That is the north half of section 15 that is not irrigated, but the land lying west of it is irrigated.
Q. From what source is that land irrigated?
A. It is irrigated by water from the division gate. Dr. Chandler put in a gate right here in the corner of this (indicating upon the map) for his own benefit—to water land lying along here—and Mr. Moote gets water out of the same canal; so it is irrigated right from the Consolidated head.
Q. I am speaking of this land between the Consolidated canal and the Ayers head gate. Was this land cultivated?
A. This land in here never was cultivated from the Ayers head gate.

By Judge POPE:

Q. And now it is irrigated?

A. Before this water improves this tract he takes it in here to water his own land and Mr. Moote's land. He objected for us people out here (indicating) ought to have the benefit of that tract.

Q. He then takes the water out this way?

A. Yes, sir.

That is all.

By Judge STREET: That is all.

Witness excused.

306 Mr. SYLVESTER MOOTE, a witness duly called, sworn according to law to testify to the truth, the whole truth, and nothing but the truth, was examined upon his corporal oath and testified upon behalf of the defendants as follows, to wit:

Examination by Judge STREET:

Q. Where do you live?

A. Near Mesa.

Q. Are you acquainted with the canals in question in this case?

A. Yes, sir.

Q. Did I understand that you were a director in the Mesa canal?

A. Yes, sir.

Q. How long have you been a director in the Mesa Canal Co.?

A. It is 2 years ago last April that I was made a director.

Q. State whether or not the directors of the Mesa Canal Company had any talk with Dr. Chandler about the building of the new Lewis ditch before it was built—that is, within your knowledge.

A. We knew they were trying to get at a settled arrangement between themselves.

Q. Who were the parties under the Lewis ditch?

A. I don't know all of them now.

Q. Who were the ones that did the talking with Dr. Chandler?

A. They were the parties under that ditch; they tried to come to a satisfactory agreement, and the Mesa Canal Company came to a satisfactory agreement on our side, as we was mutually interested and hoped that the things would be settled without coming

307 into court.

Q. What was the talk between you as directors to Dr. Chandler about the building of that ditch and the taking of the water—as to the height that it should be taken or delivered?

A. Well, we understood—at least a majority of the board understood—that we had the water under all of the improved conditions that existed above there in the Consolidated or main canal, but as he disputed that—it was a friendly dispute—there was more or less dickering to fix it up satisfactory to all concerned, and at different times when we would get to the point where we was going to start into a suit Dr. Chandler would meet with us and start negotiations and give us inducements so that we would come to a settlement,

and in the meantime nothing would come *if* it, and this state of things went on a year or so before we did finally *did* get into court.

Q. What did Dr. Chandler say about digging that ditch?

A. One of his propositions was—after taking a measurement over the Ayers land—he found that the Ayers land was 2 inches higher than the floor of the division gates; and there was a proposition that Chandler had agreed to, but it was not submitted in writing, that we would really get the surface water about 8 inches above the floor of the division gates, in order to get a flow of water to the Ayers land—we were to have the water on either side—but nothing came of it.

Q. That was in order to get a flow of water to the Ayers land and also to the east?

308 A. Yes, sir.

Q. State whether or not the water has been so used down to the Ayers land.

A. Yes, sir.

Q. State whether or not it has been so used to the east.

A. It hadn't up to that time, but it has been used since the check was put in.

Q. The only way in which it has been used is by the construction of the canal and by the canal parties interested and their putting in a check?

A. Yes, sir. The Mesa Canal Company did it.

Q. At that time was there anything said about any water power?

A. No, sir; I never heard it mentioned.

Q. When did you first hear of the water power?

A. It was when we commenced to talk about putting in this check here.

Q. And that was after the canal was constructed?

A. Yes, sir. He objected to that, and claimed his water power would be injured as an objection.

Q. What was said between the directors and himself about that water?

A. We claim that we had no talk about the water power, but we came down and took counsel after that, and concluded finally that we would put in the check, and if it interfered with him we couldn't help it.

Q. Do you know the Ayers ditch?

309 A. Yes, sir.

Q. State whether you have ever irrigated any lands through the Ayers ditch.

A. Well, to begin with, as Mr. Stewart said, when I first went there they were just nearly completing the Ayers ditch. It wasn't entirely completed, and different parties below me—Mr. Roberts and Mr. Passey and Reilley—had gone into the construction of it with the calculation of making that lateral so as to irrigate under it; my land was above the ditch—that is, my quarter is the southwest quarter of section 15—and while by going on with this Ayers ditch it brought it all under cultivation, it would be better, say, for me to get the water that way; consequently I started this and con-

structed it as all right, but I was a stranger in the country and didn't know as much about ditches as I do now.

When Mr. Ayers proved up, there was a larger check in the canal. It took a larger check than he had any ides of to get the water out. They first put in the bottom plank, and then he put three planks on top of that, and it raised the canal about three feet, and that filled the length of it and made a large canal, and he proved up on his land in that way. As soon as he got through he turned the ditch onto me and others below us, but there was one plank taken off and the water run over those other two planks until the flood came down and washed everything out. That was some two or three months before we got any water, but in the meantime Dr. Chandler gets
310 a hold and commences the construction in the Mesa.

Q. Go on.

A. Well, I had irrigated just two or three times, and then the big wash came.

Q. State whether or not the south half of section 15 is higher or lower than the north half.

A. It is lower. I wish to say that after the canal was constructed I irrigated a month or six weeks from the Ayers ditch and for several months afterwards.

Q. Now, about Dr. Chandler's commencing the construction of the canal; tell us about that.

A. Well, the ditch washed out, and I don't know whether it was him or the Mesa Canal Company that was washed out; but I think it was Dr. Chandler that took hold of it that spring, and anyway it was out for two months, and then when it came in again I used the water from the Ayers ditch. That was in 1891.

Q. What, if anything, do you know about Dr. Chandler putting in a check at the junction of the Ayers division of the old Mesa and the Consolidated canal?

A. He had some land in here (indicating).

Q. What land was it?

A. He acquired some land above here on both sides.

Q. On the southwest quarter of section 11—let us presume it was?

A. Yes; and those were higher than any lands that had ever been irrigated before.

311 Q. State that again for the benefit of the court. This land here is a portion of section 11?

A. Yes, sir. It had a higher elevation than any lands that had been irrigated there, and in putting in the check it backed up the water and made more seapage and evaporation, and then when he would get through, after he would cut it loose, he would let some of it sown and it would irrigate in here and it would check the water here (indicating upon the map).

Q. State whether or not he succeeded in irrigating any portion of section 11.

A. Yes, sir, but we thought it was a nuisance and we ordered the obstruction removed.

That is all.

Cross-examination.

By Judge POPE:

Q. And then he took it out, didn't he?
A. I think so. I think the zanjeiro must have had it removed. I don't know for sure whether it was removed right away or not, but I know that it was finally removed.

By Judge STREET:

Q. State whether or not he still irrigates that land or not?
A. Yes, sir.
Q. How does he do it?
A. He has two ways of doing it. In low water he irrigates by checking the water up, but in high water I presume it is high enough.

312 That is all.
Witness excused.

Mr. GEORGE W. LEWIS, a witness duly called on behalf of the defendant, was sworn according to law, examined upon his corporal oath, and testified as follows, to wit:

Examination by Judge STREET:

Q. Where do you live, Mr. Lewis?
A. Up at Mesa.
Q. You are a stockholder in the Mesa Canal Company?
A. Yes, sir.
Q. Do you know the canals mentioned in this litigation?
A. Yes, sir.
Q. Do you know the Lewis ditch?
A. Yes, sir.
Q. How long have you known the old Lewis ditch?
A. Ever since 1879 or 1880.
Q. Did you ever irrigate any lands under it?
A. Yes, sir.
Q. Did you help to construct it?
A. Yes, sir.
Q. And you helped to construct the new ditch?
A. Yes, sir.
Q. What was the purpose of the construction of the new ditch?
A. It was made to improve our condition and facilities for irrigation.
313 Q. I wish you would state to the court succinctly the conditions that brought around the necessity for the construction of the new ditch.

Plaintiffs object to the question, as it is irrelevant, and there is no such issue in the case.

By Judge STREET:

Q. Do you know anything at all about the little machine that was put in there by Dr. Chandler?

A. Yes; I have seen it.

Q. Have you seen it running?

A. Yes, sir.

Q. How often have you seen it running?

A. Not many times.

Q. How often have you known of its running?

A. Only the times that I have seen it.

Q. State whether or not it is an effective piece of machinery or ineffective.

Plaintiff objects to the question on the ground that the witness is not shown to be an expert millwright or machinist.

By Judge STREET:

Q. What work have you ever seen him do with it?

A. I have seen him grind some barley.

Q. Tell us how much barley it was grinding in any given length of time.

A. The particular time that I have called to mind was when I was there and Mr. Metz sent up three or four sacks of grain,
314 and we were there for ½ to ¾ of an hour, and I remember that he ground only about ¼ of a sack, and he said to him, You can take that back and feed that while I am grinding some more.

Q. How many times was he grinding there?

A. I don't know.

Q. Did you see the water at the division gates last Saturday?

A. No, sir.

Q. Did you see the water this morning at the division gates?

A. Yes, sir. I have seen it in the canal for several days past.

Q. How did the stream that was going through then compare with the water that was at the division gates this morning?

A. I think there was as much or more.

Q. Were you one of the fellows that took hold of the pulley when it was going and stopped the mill from going?

A. No, sir.

Q. Did you ever see that thing done?

A. No, sir; I don't recollect of seeing it done.

Q. Have you, as one of the owners of the new ditch and one of the parties interested, had any talk with Dr. Chandler about the construction of that ditch?

A. Yes, sir.

Q. Tell us what was said.

A. I have met him a great many times and tried to arrive at an agreement. I recollect that he made one proposition to us——

By Judge POPE (interrupting): Was that the compromise
315 proposition?

A. I think so.

Plaintiffs object to the testimony.

By Judge STREET:

Q. When was it made with reference to the construction of the canal? Was it before the canal was constructed?

Plaintiffs object to the question. Objection overruled, and plaintiff excepts to the ruling of the court.

A. That was that he promised us to run the water through the ditch, providing we would not use the water above the line commencing 8 inches above the floor of the division gates running in a southeastern direction, at the grade of two feet to the mile, as far as it would go.

Q. That is the only conversation that you can give us as definitely bearing on this question?

A. I don't believe I remember anything else.

That is all.

Cross-examination.

By Judge POPE:

Q. Who was to have the use of the water power?

A. I believe that the water was to be delivered to us on the side, and not interfere with the balance of the water.

Q. And that was to be delivered from a flume?

A. Yes; I suppose so.

That is all.

Witness excused.

316 Mr. MOOTE, recalled, was examined on behalf of the defendant, and testified as follows, to wit:

Examination by Judge STREET:

Q. Did you at the time Dr. Chandler was constructing the canal from the Ayers head gate down to the division gates of the Consolidated canal, did you have any talk with him (Chandler) as a stockholder or a director?

A. Yes, sir; as a stockholder. I told him that under the conditions that he was going down there—he was cutting off a lateral through which I expected to get my water. This lateral and Ayers' ditch was temporarily abandoned because there was not fall enough to carry the water so far, and it was economy to cut it down for the present until the ditch was completed through there further west—and I protested with him and told him squarely that I didn't propose to have our lateral cut off, but he always put me off with the statement that we could get our water in the new way better than we had ever had it. All through his conversations—and we had several talks about the matter—that was the way he put me off, and I had talks with the president, Mr. Standage, in regard to the matter, as I didn't know what they proposed to do in regard to keeping up my water and the lateral; but they all thought, after talking with the president and the members of the board of di-

rectors, that it would be better to let him come down. I wanted a contract from him, but I was always put off in that way—that I was told that I would get the water better than I had ever had
317 it before, and that he didn't propose to interfere as long as Standage was the director. He always claimed that he would see that that lateral was put through, or, in other words, that he would put the water as high and give us a free bridge to the Mesa canal. We had wrangles about it afterwards, and I protested a good deal and got others to help me in regard to it.

If I got into any trouble—there was other stockholders that wasn't going to see it done—that was cut off entirely.

By Judge POPE:

Q. After you talked with Mr. Standage about this matter you acquiesced in having the Consolidated Canal Company extend their canal down to the division gates, didn't you?

A. Yes, sir.

That is all.

Witness excused.

Mr. HIRAM B. MORRIS, a witness duly called on behalf of the defendants, was duly sworn according to law, and upon examination testified as follows, to wit:

Examination by Judge STREET:

Q. Are you acquainted with the Mesa Canal Company?

A. Yes, sir.

Q. How long since have you been acquainted with it?

A. Since the winter of 1882.

Q. Do you remember of the time of the construction of the Consolidated canal by Dr. Chandler?

318 A. Yes, sir.

Q. And at the time it was constructed do you remember which way the water was going in the Consolidated canal below the Ayers head gate—whether through the old or the new canal?

A. I will state that in the construction of the Consolidated canal they left the old Mesa canal at a point on the top of the hill where the road comes up from Jonesville, and they started the construction of this new piece; then it became necessary to deliver the water through the old Mesa canal.

Q. While that was going on did you observe at any time the water going through the division gates?

A. Yes, sir.

Q. And it was taken out on section 14?

A. Yes, sir.

Q. And to what heights was it going there?

A. There was different amounts going there. During the time he was constructing this new piece of ditch they put the division gates in. In the beginning there was a small stream running there, because it was dangerous to put in a large amount while the gates were settling, but as they stood they increased the amount.

Q. State whether the Ayers head gate was separating the water while it was running through the division gates.

A. Yes, sir.

Q. To what height was it on the banks of the old portion of the canal to the Ayers head gate?

A. It was standing there nearly to the top of the bank.

319 Q. And the banks were able to support it?

A. Yes, sir; it did support it.

Q. For how long a time was this condition under your observation?

A. I cannot tell you exactly; but I was working there probably a week or ten days.

Q. What were you doing in that neighborhood at that time which gave you the advantage of seeing?

A. I was employed by Mr. Newell to watch the division gates.

Q. And while you were watching them you had an opportunity of observing the conditions?

A. Yes, sir. At different times we went along and strengthened the weak places in the banks.

Q. Was it necessary to strengthen the weak places in the old portion of the canal?

A. Yes, sir; as the volume was increased by the water we strengthened the banks later on back to the Ayers head gate for, probably, 150 to 200 yards.

Q, How far was the water backed up through the ditch?

A. It was backed up clear to where it intersected the old canal past the Ayers head gate and back to the old Montezuma cut.

Q. And how far above that point, if at all?

A. There was dead water for some distance above that.

Q. Was there enough water that it was working a strain upon the banks?

A. Yes, sir.

Q. Did you have to strengthen the banks?

319½ A. Yes, sir.

Q. And the water up to that time was running through the division gates?

A. Yes, sir.

Q. To what height did that go above the bed of the canal?

A. I couldn't tell you. I never saw any measurements put on them.

That is all.

Witness excused.

Mr. W. H. COAD, recalled on behalf of the defendant, was examined and testified as follows, to wit:

By Judge STREET:

Q. What is the height of these division gates here?

A. It is between 4 feet and 9 inches and five feet above the bottom of the Mesa canal.

Q. And the division gates shut down onto the Consolidated Canal floor?

A. Yes, sir.

Q. What is the height of those gates when they are shut down?

A. The gates proper, do you mean?

Q. Yes, sir.

A. I can tell very plainly (examining chart). It is about five feet.

That is all.

Witness excused.

320 Mr. W. A. McDONALD, a witness duly called on behalf of the defendants, was sworn according to law and examined and testified as follows, to wit:

Examination by C. M. FRAZIER, Esqr., of counsel for defendant:

Q. Where do you reside?

A. Up at Mesa.

Q. Are you one of the directors of the Mesa Canal Company?

A. Yes, sir.

Q. Since you were elected as a director of that company have you had any conversation with Dr. Chandler with reference to this water power?

A. Yes, sir.

Q. Go ahead and state what he said in reference to it.

A. It was on or about the 26th or 27th of March of the present year the board of directors met Dr. Chandler on the division gates, and there was a conversation and a dispute over some water that had been loaned to the grain-raisers under this canal that were suffering for the want of water, and the board demanded the water to supply some of the grain-raisers under the Mesa canal and he refused to give it to them; that is the reason that they met there and made a demand for the water; and at that time Dr. Chandler took me to one side and these were the words that he used: "McDonald, there are a lot of little things about this that you don't understand." He says, "Now, I have offered them people better than they have ever had it before." And he went on to tell me,

"You can have it on the west side and take the water as
321 high as you want it to water Moote's land and all that you can water on the west side, but on the east side I don't want those new lands covered." And then he brought up the argument that we were destroying his water power.

I said, Suppose we flume over this for 100 feet and we give you 100 feet below here (indicating upon the map), and that would put two feet or more power that you have on it there now. I said, How will that suit you? and he said, "Golldarned that water power!" "That is not it. I don't want those parties," naming Mr. Wallace and some others, "to draw water from the Mesa canal. That is what I built my canal for, and if you furnish them water that makes my canal played out, and it ain't worth 2 cents."

That is the conversation we had and that is what he told me the day that we met there on the gates.

Q. Do you remember distinctly that he said he didn't care anything about the water power?

A. Yes, sir; I do, sir, very distinctly. He used those words: "Golldarned the power! That ain't it."

That is all.

Cross-examination.

By Judge POPE:

Q. He had said to you before "that you were going to destroy his water power"?

A. Yes; that is when he said it. That is the argument that he used. He said that we was going to destroy his water power, and then I made the proposition that if we flumed the water over
322 on to the level and dropped it down and give you 100 feet right of way across the canal it would give him more power, and then he made the remark, "Golldarned that water power! That is not what we are after."

That is all.

Witness excused.

Mr. —— MORRIS, recalled on behalf of defendants, was examined, and testified as follows, to wit:

Examination by Mr. FRAZIER:

Q. State whether or not the water was running through the division gates at any time before you commenced to strengthen the banks.

A. Yes, sir; it was running through there for some time before that.

Q. How much water was running through there?

A. I cannot tell you.

Q. What was the strength of the flow on the division gates?

A. There was considerable water that was delivered through there before the banks was strengthened to amount to anything at all.

Q. You have referred to the strengthening of the banks upon the old canal, have you not?

A. Yes, sir.

That is all.

Cross-examination.

By Judge POPE:

323 Q. You mean running over the floor of the division gates, do you not?

A. Yes, sir.

Q. At first it run under them, didn't it?

A. Yes, sir; it run all around them on the start.

That is all.
Witness excused.
Defendants rest.

Rebuttal.

Dr. CHANDLER, being recalled in rebuttal by plaintiffs, was examined, and testified as follows, to wit:

Examination by Judge POPE:

Q. Did you ever tell Mr. McDonald that you didn't care a goll-darned for the water power at the division gates?
A. No, sir; I never told any man that.
Q. What did you tell him about the water at that time?
A. Why, he mentioned something about some trouble about turning the water into the Mesa canal, and that as he had to check it in I was afraid to turn the full amount of water in on account of the injury it might do to our division gates, because the way it was arranged it would back the water up against the wings part of the gates and there was a great deal of danger about allowing the water to come against them. I did have some sort of conversation
324 with him on that subject.

Q. I suppose you did lay stress on the fact that that was the land that you had built your canal to irrigate?
A. Yes, sir.
Q. And you haven't denied that to anybody?
A. No, sir.
Q. Now, in your negotiations that has been testified to for the purpose of settling this difficulty, state whether or not you did at all times insist that the water should be delivered in such a way as not to interfere with the water power.
A. Yes, sir.
Q. How was that water to be delivered, 8 inches above that?
A. It was to be conducted by running a flume across there.
Q. And that would allow you the use of the water power?
A. Yes, sir.
Q. Wasn't that compromise agreement carried out?

Defendants object to the question for the reason that there has been no talk of a compromise agreement.

By Judge POPE: Strike out the word compromise. I don't want to waste any time about that.

A. No, sir; because they wouldn't carry it out.
Q. Were you disposed to carry it out yourself?

Defendant objects to the question. Objection overruled.

A. Yes, sir; I was.

Defendant excepts to the ruling of the court.

Q. State whether or not the Ayers ditch was ever used after
325 you went in there to start the Consolidated canal.

A. I never saw it in use.

Q. Mr. Moote testified as to having a conversation with you in regard to that ditch. When was that?

A. It was some time after the construction of the canal.

Q. It was since you have constructed the Consolidated canal and after you have delivered his water?

A. Yes, sir; but I delivered him water at another point. He talked about the Ayers ditch, and I told him that he could have it there at any time that he wanted it.

Q. Have you delivered it to him ever since that?

A. Yes, sir; but at another point, because he didn't want it there at the old point.

Q. And that was after you had constructed your canal down to the division gates?

A. Yes, sir.

Q. You heard Mr. Wallace testify as to the same matter—the taking water at an elevation of 8 inches above the floor of the division gates. Was that the same proposition about carrying the water to be furnished by means of a flume?

A. Yes, sir. The height at which they could get it was under compromise. We talked of the different heights, and they had tried to compromise without effect, and they held that as a club over me, so we decided that he could take it at the same height as though I was back to the Ayers head gate, which amounted to about one foot below the division gates.

326 That was satisfactory at that time, and they were willing to enter into that agreement, and afterwards such an agreement was passed by the board of directors and ordered to be signed; but afterwards they found that in getting their water at that height it wouldn't serve their purposes.

Therefore the president was willing to sign the papers, but the secretary was not, so we never got the contract signed, and then we compromised again. We didn't want to allow that fall. We had been talking it over, and I said, Now, when we get this thing fixed up we don't want to hear any more complaints. We want to fix that proposition once for all; and we decided upon the height, and they told me they wanted to take the water at a height which was 2 inches above the floor of the division gates, and we decided upon that; and finally they found that that wouldn't serve their purpose, and then they kicked at that, and they said, If you will let us have a little fall to it, it will take it to the Ayers land, because that was the highest that they ever could get it under any circumstances—if you will give us a little fall between the Ayers head gate and the Ayers land, say 6 inches higher, with the 2 inches added, which would make 8 inches higher than the floor of the division gates—then they would be satisfied; and I said, I don't like to do this again, but to get this matter forever settled I said I would do that, and four directors stood pat on it, and they were perfectly satisfied that they could go before the meeting of the stockholders and satisfy

them that they had got really more than they were entitled
327 to; and they passed a resolution on the ground, and I was reserving the balance of the water if it wasn't taken out for the water power.

That proposition was protested against by one member and agreed to by four members of the board of directors; then we tried to get a contract signed up, but then one director seemed to have more pull than the other four, and we never could get that contract signed.

Q. Who was that director?

A. It was Dr. Wilbur. Then they wanted to get another compromise, and I said, No, sir; I will not give it to you one inch higher. I said, I have given you your own propositions about 6 different times, and you have failed to sign up the contract when it was drawn. Now, if you want to take it at the height mentioned we will arrange for a flume and I will arrange for the drop, or you can go into the court and settle it there.

One of the directors suggested that if I would give it to them at an elevation of eleven inches higher that he would fix it up all right; but I said no, and to this day we have never fixed it up.

Q. These negotiations were with a view of compromising the matter between you and the Mesa Canal Company?

A. Yes, sir; and to save all of this trouble.

Q. State whether or not, at any time in these negotiations, you ever proposed to let them stop that water power so that you couldn't have that power.

328 A. No, sir; and the records of their minutes will show it.

That is all.

Cross-examination.

By Judge STREET:

Q. Isn't it a fact that the reason these agreements were not signed was because they would not submit to your using the water power?

A. No, sir.

Q. Wasn't there something said about the objection raised by you to signing any contract because you couldn't limit them to the lands to be irrigated that you wanted to?

A. With the Mesa Canal Company?

Q. Yes, sir.

A. No, sir.

Q. And to this new ditch?

A. Not with the Mesa Canal Company.

Q. Then that class of diffi[illegible]y was with the owners of the new ditch?

A. Yes, sir; I told them that they had arrangements with them.

That is all.

By Judge POPE: That is all.

Witness excused.

Mr. W. H. COAD, recalled on behalf of the plaintiffs in rebuttal, upon examination testified as follows, to wit:

329 Examination by Judge POPE:

Q. About that barley-crusher spoken of in the testimony, do you know what the capacity of that crusher was, and for what time it was used and gotten in good running order?

A. Yes, sir.

Q. How much grain was the capacity of that mill?

A. It was about 10 or fifteen sacks of grain per hour.

Q. How much grain is supposed to be in a sack?

A. In the neighborhood of 90 pounds.

Q. Do you know how long that barley-crusher was used?

A. No, sir; I do not.

Q. Is it used now?

A. No, sir.

Q. What became of it?

A. It was taken out.

Q. Why was it taken out, if you know?

A. Because this check in question backed the water up over the platform, and we couldn't use it.

Q. That is the check that was put in the canal by the Mesa Canal Company?

A. Yes, sir.

That is all.

Cross-examination.

By Judge STREET:

Q. How much, as a matter of fact, did it ever grind in any one hour?

330 A. From 10 to 15 sacks per hour.

Q. For how many hours did it do that?

A. For a good many hours, but perhaps it didn't grind it steadily.

Q. Were you ever present when it was grinding as much as one sack per hour?

A. Yes, sir.

Q. Were you ever present when it was grinding as much as 2 sacks per hour?

A. Yes, sir.

Q. Did you ever stop there a full hour to see whether it did grind 2 sacks per hour or not?

A. Yes, sir.

Q. Did you ever stay there long enough to ascertain whether it ground three sacks in an hour?

A. Yes, sir.

Q. Was anybody else there at the time?

A. Yes, sir.

Q. Who?

A. The man that run the mill.
Q. Who else was there at such a time?
A. The man that helped him run the machinery.
Q. Did you ever see anybody else there?
A. Yes; different parties at different times were there.
Q. Did you ever know of its acting so badly that it wouldn't grind ½ a sack in three hours?
A. Yes, sir; when we first put it in it was very crude.
331 Q. How long were you in getting it down to business so that it would grind, say, 10 sacks per hour?
A. I have forgotten the time.
Q. After you got it to that state of perfection, how long did it stay there until the Mesa Canal Company put their dam in the canal below there?
A. I don't know the exact time.
Q. How many days, about?
A. I think it was over a month, and perhaps it was longer than that.
Q. How much of that time was it grinding grain?
A. I couldn't say; I didn't keep a tab on it.
Q. Was it as much as one day in the month?
A. Yes; but it seemed a very short time.
Q. How many sacks did it grind from the time it went in there until it went out?
A. I couldn't say. I could only give a guess at it.
Q. Well, give us a guess, then.
A. Well, it was several hundred sacks; perhaps in the neighborhood of 500 or 1,000 sacks.
Q. How long did it lay idle before the check was put in?
A. I don't know as it laid idle. We were using it whenever we had an occasion to sell barley. We didn't get a demand for barley every day, but when we did, they generally wanted it rolled.
Q. Wasn't it lying idle sometimes as long as a month?
A. No, sir.
332 Q. Wasn't it lying idle at times as long as three weeks at a time?
A. No, sir.
Q. Was it as much as one week?
A. Possibly as much as one week; yes.
Q. Then it might have, possibly, laid idle as much as one week at a time?
A. Yes, sir.
Q. How many months was it in there altogether?
A. I don't know.
Q. Do you know when it went in there?
A. No, sir.
Q. Do you know when it went out?
A. Well, it was after they put in the dam, which was March 21st.
Q. Was it ever in use for one whole day?
A. Perhaps not.
Q. Was it ever in use for as much as ½ a day?

A. Yes; I think it was in use that long severel times.
Q. Was it ever in use in any way excepting to make a show?
A. Yes, sir.
Q. It was really used for practical purposes?
A. Yes, sir.

That is all.
By Judge POPE: That is all.
Witness excused.

333 Mr. —— PETERSON, being recalled on behalf of plaintiffs, was examined and testified in rebuttal as follows, to wit:

Examination by Judge POPE:

Q. Do you know anything about the grinding up at that mill in the canal, which has been testified to here?
A. Yes, sir; I have bought considerable rolled barley of Dr. Chandler that was ground there
Q. How much did you pay for barley that was ground there?
A. Probable $200.00.
Q. How much did it ever grind in one hour?
A. I think 10 sacks in an hour.

That is all.

Cross-examination.

By Judge STREET:

Q. Did you see it grind 10 sacks of barley in one hour?
A. Yes, sir.
Q. How do you know that the barley was ground there that you bought from Dr. Chandler?
A. Because I seen it being ground.
Q. How much have you ever seen ground there?
A. I saw one wagon-load ground there.
Q. How long did it take that mill to grind it at that time?
A. It was two hours, perhaps.
Q. How much was there in the wagon-load that time?
A. There was about 20 or 25 sacks, I think.
334 Q. Was that your wagon that was loaded with those sacks of grain?
A. Yes, sir.
Q. Did you haul it there to be ground?
A. It was grain that we bought there, and I got a man to come up there, and I went up there with him.
Q. Did you see it ground there?
A. Yes, sir.
Q. Then you paid for it after it was ground with the machine?
A. Yes, sir.
Q. When was that?
A. I don't remember exactly, but the most of the barley that we bought was in——

Q. Well, when was it?
A. Well, I couldn't say.
Q. Give us the year.
A. It was in 1895.
Q. In what season of the year was it?
A. Well, we were buying barley from along in October, November, and December.
Q. How much water was running through the division gates onto the wheel at that time?
A. I don't know; there might have been 3,000 inches.

That is all.
By Judge STREET: That is all.
Witness excused.
Plaintiffs rest. Defendants rest.

335 The cause was thereupon closed, to be submitted on briefs to be presented by counsel instead of oral argument.
The court thereupon adjourned.

PLAINTIFF'S EXHIBIT A.

This article of agreement, made and entered into this 10th day of January, A. D. 1891, by and between the Mesa Canal Company, a corporation duly organized and legally existing under and by virtue of the laws of the Territory of Arizona, having its principal office and place of business at Mesa city, in the county of Maricopa and Territory of Arizona, party of the first part, and A. J. Chandler, of the city of Phœnix, in the county and Territory aforesaid, party of the second part, witnesseth:

That whereas, the said party of the first part is an irrigating corporation, and as such is now the owner operating the Mesa canal in said county and Territory; and

Whereas, said party of the second part desires to increase the size and capacity of said canal between the point in Salt river where the water is now taken out, or by consent of the directors of the Mesa Canal Company may hereafter be taken out, and a point in the said Mesa canal known as "Ayers' head gate" so as to increase the flow of water through said portions of said canal as aforesaid, and for the purpose of the party of the second part, his associates and assigns, obtaining water thereby through said canal, and in order to
336 have said canal increased in size, dimentions and capacity without cost or expense to the said party of the first part, and without in any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal and the water flowing through said canal, except as hereinafter provided; and

Whereas, at a meeting of the stockholders of the said Mesa Canal Company, the party of the first part, duly called and legally held at the office in Mesa city aforesaid, on the 10th day of January, A. D. 1891, the said stockholders, by vote thereof, viz: 221 votes for

and 130 votes against, direct that this agreement in terms, words and figures as hereinafter expressed should be by said Mesa Canal Company entered into with the said A. J. Chandler, his associates and assigns and that the president and secretary of the said Mesa Canal Company should execute said agreement on the part of said canal company under the corporate name and seal and sign the same as president and secretary thereof.

Now therefore, the Mesa Canal Company, party of the first part, for and in consideration of the sum of one dollar to it in hand paid by the party of the second part, the receipt whereof is hereby acknowledged, and for the further consideration and purposes herein contained and expressed, does for itself and for its successors or assigns, hereby grant unto the said A. J. Chandler, his associates, heirs, or assigns, forever, the following rights and privileges, upon the terms and conditions herein expressed, viz:

337 That the said A. J. Chandler, his associates, heirs or assigns, shall have the right and privilege of entering upon any and all of the following portions of said Mesa canal at any time prior to the first day of March, A. D. 1891, for the purpose of widening and enlarging and increasing the size and capacity of said Mesa canal between the point in Salt river where the water is now, or may hereafter be taken out for said canal, and a point on said canal known as "Ayers' head gate," and enlarge and increase the size and dimentions of the main dam and head gates at the point of commencement of said canal in Salt river, and enlarge and increase the size and capacity of said Mesa canal so that the same, when so enlarged and increased in size, shall have a carrying capacity in addition to its present carrying capacity not exceeding 40,000 inches of water, miners' measurement, and the said enlargement shall be fully made and completed by the 30th day of December, A. D. 1891. The present carrying capacity of the said Mesa canal for the purposes of this agreement shall be 7,000 inches, miners' measurement.

All the costs and expenses of enlarging and increasing the size of said dam, head gate and canal as aforesaid, shall be borne and paid by the party of the second part, his associates, heirs and assigns forever. And said enlargement shall be made without in any way interfering with any of the rights, titles, interests or privileges of said party of the first part in and to the said canal, and the water flowing through the said canal, except as hereinafter provided:

338 The party of the first part hereby reserves the right to further enlarge said portions of the Mesa canal whenever they deem it necessary to do so, provided such enlargement shall not interfere with or lessen the rights or privileges herein granted to the party of the second part, his associates or assigns.

The said party of the second part, his associates or assigns shall have the right to turn the water out of said Mesa canal for the purpose of enlarging the same as aforesaid from time to time as the work may progress or require, but said water shall not be turned out of said canal for a period exceeding fifteen days at any one

time; after being turned out for fifteen days it shall be turned in again, and remain in said canal for a period of ten days each time it is turned in, unless permission is granted by the directors of the said Mesa Canal Company to turn the water out of said canal for a longer period than the time above specified; provided, it shall not be turned out at all between the first dau of March and the first day of November without the consent of the directors of the Mesa Canal Company.

Said party of the second part, his associates and assigns shall, in enlarging said main dam, head gates and canals as aforesaid, in all respects enlarge said dam, head gates and canal in a good substantial and workmanlike manner, according to the most approved methods of constructing and building irrigating canals.

All suits, liabilities, costs, expenses of judgments and all damages or loss incurred or sustained by the party of the first part caused by said enlargement, shall be borne by the party of the sec-
339 ond part, his associates or assigns forever; and all suits or proceedings against the party of the first part by reason of said enlargement to be defended at the expense of the party of the second part.

It is expressly understood and agreed by the parties hereto, their successors or assigns, that at all times when there is an abundance of water in Salt river liable to appropriation and flowage through said canal when so enlarged, then and at all such times the said party of the first part shall have the right to use from said canal in addition to the amount hereinbefore specified as the capacity of said canal, 2,000 inches of water, miners' measurement.

The management and control of the canal between the point known as Ayers' head gate to, and including the dam in Salt river, when so enlarged as aforesaid, shall be in the party of the second part, his heirs, associates or assigns, provided, that the party of the second part, his heirs, associates or assigns, shall, before he or they are entitled to receive or use any water through said canal, first deliver to the party of the first part, their heirs or assigns, at the point in said Mesa canal known as "Ayers' head gate," and shall continue to deliver the 7,000 inches of water, miners' measurement, above expressed as the carrying capacity of the said Mesa canal, or such portion thereof as may be apportioned to said Mesa canal be decree of any court. Provided, the stockholders who are now using, or who may hereafter use water above the Ayers head gate, shall have their water delivered to them as at present above the
340 Ayers head gate aforesaid, or said stockholders shall have their water delivered to them at the Ayers head gate with the other stockholders, as they may demand; provided, the Mesa Canal Company further agrees that in consideration of the said A. J. Chandler, his associates or assigns delivering water at the aforesaid point of delivery within the time specified, to pay to the said A. J. Chandler, his associates or assigns, the annual rental for said 7,000 inches of water forever, at $8.75 (eight and $\frac{75}{100}$) dollars per share of stock, payable semi-annually.

It is hereby agreed that if any disagreement arise between the

parties hereunto in relation to the division of the water, and any suit shall be instituted thereon by either party hereunto, the parties hereby mutually request the judge of the court in which such suit shall be pending to forthwith appoint some suitable and disinterested party to make the division of the water to the terms of this agreement, until said suit shall be settled, either by decree of the court, or agreement of the parties hereunto.

It is further expressly agreed by the party of the second part that in case of any break in the canal, or dam aforesaid, thereby causing said water to be turned out of said canal, then, and in every such case the said party of the second part, his heirs or assigns shall forthwith, without delay, cause said dam or canal to be repaired, and the water turned into said canal as soon thereafter as shall be possible to do so.

Provided, further, that if the said party of the second part, his associates or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement,
341 and shall be notified by the directors of the Mesa Canal Company of such failure of neglect to carry out the terms of this agreement, and shall still neglect to carry out the terms of this agreement for a period of ten days thereafter, or in such case as a break in the canal, head gates or dam whereby the water is turned out for a period of five days, then, and at all such times it is hereby agreed by the party of the second part, his heirs, associates and assigns, that the directors of the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, and the same shall become the property of the Mesa Canal Company, and shall so remain until the party of the second part, his associates, heirs or assigns, shall fully comply with the terms and requirements of this agreement, and shall then revert back to the party of the second part his associates, heirs or assigns, and shall be and remain in the party of the second part, his heirs or assigns, so long as the terms of this agreement shall be by them complied with.

This agreement shall not give or convey to the party of the second part, his associates, heirs or assigns, any title or ownership in or to the capital stock of said Mesa Canal Company, but shall only convey such privileges and rights as are herein mentioned.

The name of the Mesa canal shall not be changed but shall always be known as the Mesa canal.

In witness whereof, the said Mesa Canal Company, party of
342 the first part, has this 13th day of January, A. D. 1891, caused its corporate name to be hereunto subscribed, and its corporate seal affixed and these presents signed by its president and secretary, and the said party of the second part has signed these presents this 13th day of January 1891.

THE MESA CANAL COMPANY,
By WILLIAM N. STANDAGE, *President.*
THE MESA CANAL COMPANY,
By WILLIAM J. LE BARON, *Secretary.*
ALEXANDER J. CHANDLER.

TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, Geo. Passey, a notary public in and for said county, on this day personally appeared William J. Standage, the president of the Mesa Canal Company, and William J. Le Baron, the secretary of the Mesa Canal Company, known to me to be the persons whose names are subscribed to the foregoing instrument as such president and secretary, and each acknowledged to me that the corporate name was subscribed to said instrument and the corporate seal affixed by order of the stockholders of said corporation, and that they and each of them signed said instrument as such president and secretary by like order of the stockholders, and that they executed such instruments in behalf of said corporation for the use, purpose, and consideration therein expressed.

Given under my hand and seal of office this 13th day of January, A. D. 1891.

——— ———,
Notary Public.

343 TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, Geo. Passey, a notary public in and for said county, on this day personally appeared A. J. Chandler, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this 13th day of January, A. D. 1891.

GEO. PASSEY,
Notary Public.

Endorsed: Plaintiff's Exhibit A, Contract. Mesa Canal Co. with A. J. Chandler. January 10th, 1891. Filed December 12th, 1896. J. E. Walker, clerk, by C. H. Knapp, deputy clerk.

PLAINTIFF'S EXHIBIT B.

Notice of Location of Water Right, Dam Site, and Head of Canal.

Notice is hereby given that I, the undersigned, a citizen of the United States, under and by virtue of the provisions of the statutes of the United States and of the Revised Statutes of the Territory of Arizona, have this day located and do hereby locate and claim and appropriate for agricultural, mining, and other purposes the full quantity of fifty thousand (50,000) miners' inches, measured under a four-inch head of the water of the Salt river, in said Territory of Arizona; which said quantity of water of said river I so
344 hereby claim and will divert, take, and appropriate to the purposes aforesaid, at the point where this notice is posted, which point is situate on the east bank of said Salt river, in the

county of Maricopa and Territory of Arizona, about two hundred (200) feet above the north or upstream end of the present dam of the Arizona canal and about fifty (50) feet from the water's edge.

And in connection with and as a part of said water right I claim the following-described site for a dam, to wit:

From the head of said canal line, which is indicated by a stake at the head of survey and marked "O. C. 21, 41," which stands about fifteen (15) feet from the water's edge and midway between two small monuments of stone down to the dam of the Arizona canal, and one thousand (1,000) feet up the channel of said river and extending across to opposite banks of said river to point of rocks, back from the low-water line on each side of said river a distance of three hundred (300) feet and bounded by lines parallel to said canal, and all the land which will — flowed or covered by dam built thereon six (6) feet above low-water line.

I hereby further locate and claim as a part and parcel of said water right a canal head sixty-six (66) feet in width in the rock bank of said river to one hundred (100) feet north of where this notice is posted and at such an elevation in said rock bank as I may hereafter determine, at which point I will, by a channel of sufficient capacity to convey the water aforesaid, divert, conduct, and distribute the quantity of water aforesaid of said Salt river for a distance of forty (40) miles, more or less, and for which purpose I claim the right of way over and across the public lands of the
345 United States to the extent of one hundred (100) feet on each side of the centre line of said canal for its entire length, which will be definitely fixed by a survey to be hereafter made, and by the means aforesaid appropriate and actually use the water aforesaid in irrigating the lands of the valleys of the Salt and Gila rivers, in said county of Maricopa, and for the other purposes aforesaid.

In witness whereof I hereunto set my hand and seal this 19th day of July, A. D. 1890.

ALEXANDER J. CHANDLER.

Filed and recorded at the request of A. J. Chandler July 19th, 1890, at 5.35 o'clock p. m.

NERI OSBURN,
County Recorder,
By EUGENE GRAHAM, *Deputy.*

PLAINTIFF'S EXHIBIT C.

Notice of Location.

Notice is hereby given that the undersigned, A. J. Chandler, a citizen of the United States and of the Territory of Arizona, hereby locates and appropriates out of the waters of the Salt river, in said Territory, at a point where this notice is posted, 1,250 cubic feet of water per second flow of the unappropriated surplus and flood waters of the said river, both surface and underground flow.

That this location and appropriation of water is made by the

undersigned for useful and beneficial purposes, to wit, for delivering to consumers, rental, milling, irrigation, mechanical, domes-
346 tic, stock, or any other use which may be considered for a beneficial purpose.

That the place where the diversion of said water will take place is at a point where this notice is posted, to wit, at a point on the left bank or south side of the said river, distant about 1,500 feet in an easterly direction from the center of section 22, T. 2 N., R. 6 E., Territory aforesaid.

Notice is further given that the undersigned intends to build and maintain a dam at the point where this notice is located, and I hereby locate a site for said dam at this point, and, further, that the undersigned hereby locates the right of way therefor and claims the right to construct and maintain conduits, drains, and to lay pipes in the bed of said river, both above and below the site of said dam, and to place machinery therein in the bed of said river for the full development of any underground flow of water therein in said river for the uses and purposes hereinbefore specified and to be flowed in the undersign-'s canal herein named.

Notice is hereby further given that it is the intention of the undersigned to construct and maintain a canal or ditch from the point where this notice is located in a southwesterly direction to a terminal point at or near the center of section 34, township 2 south, range 5 east, for the diverting of said waters from said river and carrying them therein for the purposes aforesaid.

Dated this 15th June, 1893.

A. J. CHANDLER.

Witness-:
W. H. COAD.
F. H. TODD.

347 Filed and recorded at the request of A. J. Chandler June 16th, 1893, at 8.30 a. m.

NERI OSBORN, *County Recorder*,
By WILLIAM E. THOMAS, *Deputy*.

PLAINTIFF'S EXHIBIT No. 3.

Map on file with the clerk of the court.

DEFENDANT'S EXHIBITS.

DEFENDANT'S EXHIBIT No. 1.

This article of agreement, made and entered into this fourteenth day of December, A. D. 1889, by and between the Mesa Canal Company, a corporation duly organized and legally existing under and by virtue of the laws of the Territory of Arizona, having its principal office and place of business at Mesa city in the county of Maricopa and Territory of Arizona, party of the first part, and A. J. Chandler of the city of Phœnix, in the county and Territory aforesaid, party of the second part, witnesseth:

That, whereas, the said party of the first part is an irrigating corporation, and as such is now the owner, operating the Mesa canal in the said county and Territory.

And, whereas, said party of the second part desires to increase the size and capacity of said canal between the point in Salt river where the water is now taken out, or by consent of the directors of the Mesa Canal Company may hereafter be taken out, and a
348 point in said Mesa canal known as "Ayers' head gate," so as to increase the flow of water through said portions of said canal as aforesaid, and for the purpose of the party of the second part, his associates and assigns, obtaining water thereby through said canal, and in order to have said canal increased in size, dimentions and capacity without cost or expense to said party of the first part, and without in any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal and the water flowing through said canal, except as hereinafter provided.

And, whereas, at a meeting of the stockholders of said Mesa Canal Company, the party of the first part, duly called and legally held at the office in Mesa city aforesaid on the fourteenth day of December, A. D. 1889, the said stockholders by vote thereof, viz: 298 votes for and 10 votes against, direct that this agreement in terms, words and figures as hereinafter expressed should be by said Mesa Canal Company entered into with the said A. J. Chandler, his associates and assigns, and that the president and secretary of the said Mesa Canal Company should execute said agreement on the part of said canal company under the corporate name and seal and sign the same as president and secretary thereof.

Now, therefore, the Mesa Canal Company, party of the first part, for and in consideration of the sum of one dollar to it in hand paid by the party of the second part, the receipt whereof is hereby acknowledged, and for the further consideration and purposes herein contained and expressed, does for itself and for its successors or assigns hereby grant unto said A. J. Chandler, his associates,
349 heirs or assigns forever, the following rights and privileges upon the terms and conditions herein expressed, viz:

That the said A. J. Chandler, his associates, heirs or assigns shall have the right and privilege of entering upon any and all of the following portions of said Mesa canal at any time prior to the first day of March, A. D. 1891 for the purpose of widening and enlarging and increasing the size and capacity of said Mesa canal between the point in said Salt river where the water is now, or may hereafter be taken out for said canal, and a point on said canal known as "Ayers' head gate,"and enlarge and increase the size and dimentions of the main dam and head gates at the point of commencement of said canal in said Salt river, and enlarge and increase the capacity of said Mesa canal so that the same, when so enlarged and increased in size, shall have a carrying capacity in addition to its present carrying capacity not exceeding forty thousand inches of water, miners' measurement, and said enlargement shall be fully made and completed by the thirtieth day of December A. D. 1891.

The present carrying capacity of said Mesa canal for the purposes of this agreement shall be seven thousand inches, miners' measurement.

All the costs and expense of enlarging and increasing the size of said dam, head gates and canal as aforesaid shall be borne and paid by the party of the second part, his associates, heirs or assigns forever. And said enlargement shall be made without in any way interfering with any of the rights, titles, interests or privi-
350 leges of said party of the first part in and to the said canal and the water flowing through said canal, except as hereinafter provided.

The party of the first part hereby reserves the right to further enlarge the said portion of the said Mesa canal whenever they deem it necessary to do so, provided such enlargement shall not interfere with or lessen the rights or privileges herein granted to the party of the second part, his associates or assigns.

The said party of the second part, his associates or assigns, shall have the right to turn the water out of said Mesa canal for the purpose of enlarging the same as aforesaid from time to time as the work may progress or require; but said water shall not be turned out of said canal for a period exceeding fifteen days at any one time; after being turned out for fifteen days, it shall be turned in again and remain in said canal for a period of ten days each time it is turned in, unless permission is granted by directors of the Mesa Canal Company to turn the water out of said canal for a longer period than the time above specified, provided: it shall not be turned out at all between the first day of March and the first day of November without the consent of the directors of the Mesa Canal Company.

Said party of the second part, his associates or assigns shall in enlarging said main dam, head gates, and canal as aforesaid, in all respects enlarge said dam, head gates and canal in a good, substantial and workmanlike manner, according to the most approved methods of constructing and building irrigating canals.

351 All suits, liabilities, costs, expenses or judgments, and all damages or loss incurred or sustained by the party of the first part caused by said enlargement, shall be borne by the party of the second part, his associates or assigns forever, and all suits or proceedings against the party of the first part by reason of said enlargement to be defended at the expense of the party of the *party of the* second part.

It is expressly understood and agreed by the parties hereto, their successors or assigns, that at all times when there is an abundance of water in Salt river liable to appropriation and flowage through said canal when so enlarged, then and at all such times the said party of the first part shall have the right to use from said canal in addition to the amount hereinbefore specified as the capacity of said canal, two thousand inches of water, miners' measurement.

The management and control of the canal between the point known as "Ayers' head gate," to and including the dam in Salt river when so enlarged as aforesaid, shall be in the party of the second part, his

heirs, associates or assigns, provided: that the party of the second part, his heirs, associates or assigns, shall before he or they are entitled to receive or use any water through said canal, first deliver to the party of the first part, their heirs or assigns, at the point in said Mesa canal known as "Ayers' head gate," and shall continue to deliver the seven thousand inches of water miners' measurement,
above expressed as the carrying capacity of said Mesa canal,
352 or such portion thereof as may be apportioned to said Mesa canal by decree of any court.

Provided, the stockholders who are now using or who may hereafter use water above the Ayers head gate, shall have their water delivered to them as at present above the Ayers head gate aforesaid, or said stockholders shall have their water delivered to them at the Ayers head gate, with the other stockholders as they may demand; provided, further, that the water shall be delivered to the party of the first part after the completion of the said canal as aforesaid for a period of five years without cost to the party of the first part, their successors or assigns, and thereafter for a sum not exceeding three dollars per share per year forever, to be paid for in the same manner as they now pay for the same.

It is hereby agreed that if any disagreement shall arise between the parties hereunto in relation to the division of the water and any suit shall be instituted thereon by either party hereunto, the parties hereby mutually request the judge of the court in which such suit shall be pending to forthwith appoint some suitable and disinterested party to make the division of the water according to the terms of this agreement until said suit shall be settled either by decree of the court or agreement of the parties hereunto.

It is further expressly agreed by the party of the second part that in case of any break in the canal or dam aforesaid, thereby causing the water to be turned out of said canal, then and in every such case the said party of the second part, his heirs or assigns, shall forthwith without delay cause said dam or canal to be repaired and
the water turned into said canal as soon thereafter as shall
353 be possible so to do.

Provided further: that if the said party of the second part, his associates, heirs or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement, and shall be notified by the directors of the Mesa Canal Company of such failure or neglect to carry out the terms of this agreement, and shall still neglect to carry out the terms of this agreement for a period of ten days thereafter, or in such case as a break in the canal, head gates and dam whereby the water is turned out for a period of five days, then and at all such times it is hereby agreed by the party of the second part, his heirs, associates or assigns, that the directors of the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, and the same shall become the property of the Mesa Canal Company and shall so remain until the party of the second part, his associates, heirs or assigns, shall fully comply with the terms and requirements of this

agreement, and then shall revert back to the party of the second part, his associates, heirs or assigns, and shall be and remain in the party of the second part, his associates, heirs or assigns, so long as the terms of this agreement shall be by them complied with.

This agreement shall not give or convey to the party of the second part, his associates, heirs or assigns, any title or ownership in or to the capital stock of said Mesa Canal Company, but shall only convey such privileges and rights as are herein mentioned.

The name of the Mesa Canal Company shall not be changed
354 but shall always be known as the Mesa canal.

In witness whereof the said Mesa Canal Company, party of the first part, has this the twenty-first day of December A. D. 1889, caused its corporate name to be hereunto subscribed and its corporate seal affixed and these presents signed by its president and secretary, and the said party of the second part has signed these presents this twenty-first day of December A. D. 1889.

THE MESA CANAL COMPANY,
By WILLIAM N. STANDAGE, *President.*

[Seal of the Mesa Irrigating Canal Company, Maricopa Co., Arizona.]

THE MESA CANAL COMPANY,
By WM. J. LE BARON, *Secretary.*
ALEXANDER J. CHANDLER.

TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, J. W. Evans, a notary public in and for said county, on this day personally appeared William N. Standage, the president of the Mesa Canal Company, and William J. Le Baron, the secretary of the Mesa Canal Company, known to me to be the persons whose names are subscribed to the foregoing instrument as such president and secretary, and each acknowledged to me that the corporate name was subscribed to said instrument and the corporate seal affixed by order of the stockholders of said corporation, and that they and each of them signed said instrument as such president and secretary by like order of the stockholders, and that they executed said instrument in behalf of said corporation and for the use, purpose, and consideration therein expressed.

Given under my hand and seal of office this 21st day of
355 December, 1889.

[J. W. Evans' Notarial Seal.]

J. W. EVANS,
Notary Public.

TERRITORY OF ARIZONA, } ss:
County of Maricopa, }

Before me, J. W. Evans, a notary public in and for said county, on this day personally appeared A. J. Chandler, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 21st day of December, A. D. 1889.

[J. W. Evans' Notarial Seal.]

J. W. EVANS,
Notary Public.

(Endorsement:) No. 2606. District court, Maricopa county, A. T. Defendant's Exhibit 1. Consolidated Canal Company against The Mesa Canal Company. Filed December 12th, 1896. J. E. Walker, clerk, by C. H. Knapp, deputy clerk.

DEFENDANT'S EXHIBIT No. 2.

MESA, A. T., *May 1st*, 1894.

To the Consolidated Canal Company and A. J. Chandler:

356 Pursuant to a resolution of the board of directors of the Mesa Canal Company, duly passed at a regular meeting of the board of directors of the Mesa Canal Company, held at the office of said company on the 13th day of April, 1894, a majority of the directors of said company being present and voting, you are hereby notified that the said Mesa Canal Company hereby demand immediate possession of all that portion of that certain irrigating canal and ditch known as the Mesa canal, situated in the county of Maricopa and Territory of Arizona, which lies between that point on said Mesa canal known as Ayers' head gate and the point in the said canal where the division gates of the Consolidated Canal Company are now located, said last-named point being at or near the N. E. corner of the N. W. ¼ of section No. 14, township No. 1 N., of range 5 east, Gila and Salt River meridian.

THE MESA CANAL COMPANY,
By W. N. STANDAGE, *Pres.*

[E. W. Wilbur's Notarial Seal, Maricopa Co., A. T.]

E. W. WILBUR, *Sec'y.*

(Endorsed.)

CONSTABLE'S OFFICE, MESA PRECINCT, *July 26th*, 1894.

I hereby certify that I received the within papers on the 26th day of July, 1894, and served the same by delivering a copy of the same to A. J. Chandler on the 26th day of July, 1894.

C. B. LEWIS, *Constable.*

Subscribed and sworn to before a notary public this 26th
357 day of July, 1894.

[E. W. Wilbur's Notarial Seal, Maricopa County, A. T.]

E. W. WILBUR,
Notary Public.

No. 2606. District court, Maricopa county, A. T. Defendant's Exhibit No. 2. Filed December 12th, 1896. J. E. Walker, clerk, by C. H. Knapp, deputy clerk.

In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Plaintiff,
vs.
THE MESA CANAL COMPANY, a Corporation, Defendant. } No. 2606.

I, Chas. H. Holmes, court reporter of the third judicial district of the Territory of Arizona, do hereby certify that I was in attendance at the trial of the above-entitled cause in the district court of the third judicial district of the Territory of Arizona in and for the county of Maricopa on the 11th day of December, A. D. 1896; that I was the duly appointed and acting court reporter of said court on said day and am now; that as such court reporter, by agree-
358 ment of the parties to this cause and under the direction of the court at the trial, I reported phonographically all of the oral evidence adduced on said day and on the following days of said trial, to wit, December 12th and December 14th, and filed the documentary evidence offered on the trial of said cause with the clerk of said court as evidence in said cause.

That I have transcribed under the direction of plaintiff all of my said short-hand notes of the evidence and proceedings taken and had upon the trial of said cause, including the objections of counsel, the rulings by the court, and the exceptions to said rulings, in the manner and at the times as therein taken and noted; and I hereby certify the foregoing 292 pages of typewritten matter to contain a full, true, correct, and complete statement of said proceedings and all of the oral evidence and documentary evidence offered and admitted in said cause, and that no other evidence was therein introduced.

In testimony whereof I, as such court reporter, hereby set my official hand on this the 31st day of July, A. D. 1897.

CHAS. H. HOLMES,
Court Reporter, Third Judicial District of Territory of Ariz.

Done at Phœnix, A. T.

359 In the District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa.

CONSOLIDATED CANAL COMPANY, Plaintiff,
vs.
THE MESA CANAL COMPANY, Defendant. } No. 2606.

Lloyd Johnston, Esq., clerk of the supreme court of Arizona Territory.

SIR: An appeal has been taken by the plaintiff in the above-entitled action from the judgment and decision rendered therein in

behalf of the defendant and against the plaintiff in this court on the 1st day of March, A. D. 1897; which said appeal has been duly perfected. I herewith certify and transmit to you the entire record in said cause, including original papers on file in this court and all minute orders in the case, the decision and judgment rendered therein in this court and entered of record therein, together with testimony taken in the case as transcribed and certified to by the court reporter and filed as a part of the record in said cause.

Dated this 16th day of December, A. D. 1897.

EDWIN S. GILL,
Clerk of the District Court.

360 In the Supreme Court of the Territory of Arizona.

CONSOLIDATED CANAL COMPANY, a Corporation, Appellant, *vs.* THE MESA CANAL COMPANY, a Corporation, Appellee.	Minute Entry, Jan. 10th, 1898.

On motion of Mr. C. M. Frazier, for appellees, it is ordered that he be granted until the 20th day of January, 1898, to file brief.

CONSOLIDATED CANAL COMPANY, a Corporation, Appellant, *vs.* MESA CANAL COMPANY, a Corporation, Appellee.	Minute Entry, Jan. 11th, 1898.

On motion of counsel for appellant, it is ordered that the hearing of this cause be set for January 25th, 1898.

CONSOLIDATED CANAL COMPANY, a Corporation, Appellant, *vs.* MESA CANAL COMPANY, a Corporation, Appellee.	Minute Entry, Jan. 18th, 1898.

On motion of Mr. C. M. Frazier, counsel for appellee, — ordered that the hearing of this cause be reset for February 7th, 1898.

361 In the Supreme Court of the Territory of Arizona.

CONSOLIDATED CANAL COMPANY, a Corporation, Appellant, *vs.* MESA CANAL COMPANY, a Corporation, Appellee.	Minute Entry, Feb'y 7th, 1898.

This cause coming on for hearing was argued by Judge Pope for appellant and by Mr. C. M. Frazier for appellee and cause ordered submitted.

The counsel for appellant asked for time to file reply and it was ordered that he have until February 14th, 1898.

Chief Justice Street did not sit at the hearing of this cause.

CONSOLIDATED CANAL COMPANY, a Corporation, Appellant, *vs.* MESA CANAL COMPANY, a Corporation, Appellee.	Judgment. Rendered June 11th, 1898.

This cause having been heretofore submitted and by the court taken under consideration and the court having considered the same and being fully advised in the premises, it is ordered that the judgment of the district court herein be, and the same is hereby, affirmed.

362 In the Supreme Court of the Territory of Arizona.

CONSOLIDATED CANAL CO., Appellant, *vs.* MESA CANAL CO., Appellee.	No. 595. Opinion. Rendered June 11th, 1898.

Appeal from the district court of Maricopa county, Hon. A. C. Baker, judge.

C. F. Ainsworth, Thos. D. Bennett, and J. D. Pope, attorneys for appellant.

C. M. Frazier, attorney for appellee.

Opinion by Doan, Justice.

This was an action brought by the appellant in the lower court to enjoin the appellee from building and maintaining a check or dam in appellee's canal, and thereby backing up the water against the division gates that separated the waters of the appellee's canal from the waters in the canal of the appellant, and thereby impeding the flow of water in the appellant's canal and destroying a water power used by appellant for propelling machinery. Both parties to this action are corporations doing business in the county of Maricopa, Arizona Territory, organized for the purpose of conveying water from the Salt river and delivering the same to the consumers and users thereof along the line of their proposed and con-
363 structed canals, and both are engaged in the transaction of such business. The appellee, being the owner of the Mesa canal, on Jan. 10, 1891, entered into a written contract with A. J. Chandler authorizing him, his successors and assigns, to take possession of that portion of the Mesa canal between a point known as Ayers' head gate and a point on the Salt river where the said canal was taken out and to reconstruct and enlarge the canal, thereby increasing its carrying capacity, and thereafter delegating to the said Chandler, his successors and assigns, the management and

control of the part so to be enlarged and reconstructed. Chandler transferred his rights under the contract to the appellant, The Consolidated Canal Company, which last-named company enlarged and reconstructed the Mesa canal down to the place called the division gates, which latter point seems by the evidence in the case to have been by mutual consent of the contracting parties substituted for Ayers' head gate as the point of division of the waters and delivery by the appellant to the appellee of the water to which the latter is entitled.

In thus enlarging and reconstructing the canal appellant raised the grade thereof at great expense for the purpose of carrying the water at a higher elevation, thereby enabling the canal to cover more and other lands.

The elevation of the grade at the point where the division gates were located was about five feet above the grade at that point on the canal formerly owned by the appellee. The purpose and desires of the appellant *was* to secure through the enlarged canal a flow of water for irrigation and other purposes for itself and patrons.

Under the terms of the agreement for such purpose it bore
364 the expense of the enlargement and reconstruction of the canal to that point from the point of diversion on the river, and obligated itself to deliver at this point to the appellee, at a certain annual rental, 7,000 inches of water, which amount was in the stipulation agreed upon as the original carrying capacity of the Mesa canal. Upon the construction of the division gates at the point named, the appellant delivered the water to the appellee at the elevation of the former canal at that point, thereby securing a waterfall of five feet in the water thus delivered. After delivering the water in that manner for some years, the appellee built a dam in its canal a short distance below the division gate that raised the water and caused it to flow through a lateral ditch that enabled the appellee to irrigate some lands under its former canal on which it had not been able to place water from its former elevation. The effect of this raise in the water was to reduce the fall at the division gate. Thereafter the appellant constructed a water wheel and a mill for grinding grain to be driven thereby and erected them at the division gate, the wheel to be turned by the water after its discharge through the division gate for delivery to the appellee; whereupon the appellee increased the height of the dam that had been formerly built to such an extent that it raised the surface of the water and backed up the same against the division gate in such a manner as to destroy three feet and a half of the five feet that had been thereby occasioned and totally destroyed the water power. A further result of the elevation of the water in the appellee's canal

was to impede the flow of water in the appellant's canal
365 above the division gate, and thereby detract from the carrying capacity of the appellant's canal.

On the refusal of the appellee, when requested by the appellant, to remove the dam this action was brought, and upon the allegation that the damage to the appellant could not be estimated or approximated and was irreparable and could not be adequately compen-

sated in money value the court was asked to enjoin and restrain the appellee from maintaining the dam at the said place or at any place below the division gates that would back up the water against said division gates and destroy or injure this water power or impede the flow of the water in the appellant's canal. The Mesa Company (appellee) demurred to the complaint, entered a general denial, and further alleged that if the grade of the Mesa canal below the head gate was raised by the Consolidated Company in the enlargement or reconstruction of the Mesa canal that said grade was not raised for the exclusive right or benefit of the Consolidated Canal Company, but inured to the benefit of the Mesa Company as well, and that the said Mesa Canal Company have the right to receive and enjoy whatever benefits may arise from the raising of said grade; that whatever machinery or appliances were placed by the Consolidated Company at the division gates or below was without any right or authority and against the rights of the Mesa Company, and was an intrusion into and a trespass upon the rights of the Mesa Company in having its water flow through and below the division gates unimpeded and unobstructed in any manner whatever.

The answer further alleges the dam was constructed about
366 75 feet below the division gates for the purpose of forcing water into a lateral ditch in order to irrigate lands which were properly irrigable through the Mesa canal below the division gates, and that the dam was built only so high as was necessary to properly run the water into the lateral ditch.

After the introduction of evidence and argument of counsel the court took the case under advisement, and afterwards rendered judgment for the defendant denying the injunction or any other relief; from which judgment of the court and the order denying a new trial an appeal was taken and the case brought to this court.

There have been some points urged in the argument that were not based upon any allegations contained in the complaint. There were some matters alleged in the complaint that were not included in the prayer for relief nor supported by the evidence introduced at the trial of the case and are not, therefore, properly before this court. The right to enjoin the defendant company is predicated in the complaint upon the destruction of the water power and the obstruction to the flow of water in the canal and the consequent diminution of its carrying capacity. The prayer is for an injunction restraining the defendant company from backing up the water against the division gates and destroying the water power and impeding the flow of water in its said canal.

The rights to enjoin the defendant company from the act mentioned or from any act in the control of its property and conduct of its business are necessarily those, and those only, which are conferred in the agreement entered into between the parties. In that
367 the appellant was entitled to receive and use the water conducted by the canal that might be constructed when such agreement was made, and that was in compliance with the terms thereof afterwards constructed by the appellant on the site of the

canal formerly owned by the appellee, but that agreement contained the express stipulation that "before it is entitled to receive or use any water through said canal it shall first deliver at the division gates the 7,000 inches of water agreed upon as the capacity of the original Mesa canal." The agreement is silent as to the elevation at which the water should be delivered, and the appellant claims the right to deliver the water at the elevation at which the Mesa Company had formerly received and used it at this point, and therefore constructed the division gates to deliver the water at such elevation. This does not seem to have been objected to by the appellee.

The water was thus received and the annual rental paid for years. There is now no step taken to compel the appellant to deliver it at any other elevation, but at its own expense, by a dam erected on its own property, the appellee is raising the water to the elevation that will enable it to use such water to cover lands that could not be irrigated at the former elevation. The destruction thereby of the water power would entitle the appellant to relief if the water power destroyed was one within the appellant's canal, or if the destruction of the use of the water to turn the wheel was destruction of or interference in the use of water which appellant was entitled to receive and use, but the evidence in the case discloses the fact that
368 the water attempted to be used to produce the water power is the 7,000 inches which under the terms of the agreement the appellant is obligated to deliver to the appellee before the appellant is entitled to receive or use any water through the enlarged canal.

The question has been raised in the pleadings as to whether the place of use was within that part of the canal over which the appellant was authorized to exercise control and management, or within the part of the canal over which the appellee had never conceded any authority to the appellant, and was therefore, under the control of the Mesa Company. It is not material to the determination of this issue which company has jurisdiction over the place where the water power is located. The stipulation in the agreement makes it obligatory upon the appellant to deliver this water to the Mesa Company "before it is entitled to receive or use any water through the canal," and therein expressly denies to and withholds from the appellant and right to the use of this water either to turn wheels or irrigate lands or for any other purpose until after it is delivered; and most assuredly the appellant could claim no right to it or authority over it or right to use it after its delivery to the parties expressly entitled to it.

The evidence does not show that the water has been raised by the check complained of above the level at which it had been carried by the appellant's canal to the point of delivery, not above the level of the water re*am*ining in the appellant's canal at that point. There being no stipulation fixing the elevation at which the Mesa water should be delivered, it would seem fair to suppose that it
369 should be delivered at the elevation of the enlarged canal at the point of delivery.

While the appellee might not be able to compel the delivery at such elevation without express agreement, it would be unjust and inequitable, without an express stipulation to that effect in the agreement, to compel the appellee to not only receive its water, but to continue to use it, at an elevation five feet lower than the rest of the water that had been carried that far in the same canal, simply to accelerate the flow of water and thus increase the carrying capacity of the canal in the interest of the other contracting party.

The slight difference thus caused in the carrying capacity of the appellant's canal would seem to have been properly held by the lower court to be insufficient ground to justify interference in the proper and advantageous use of the water in its own canal by the appellee, since the elevation to which it was thus raised did not exceed the level at which it had been carried to the point of delivery by the appellant or the level of the water in the appellant's canal that had been carried to this point in the canal that was the common carrier for the water of both parties.

An examination of the record discloses no error on the part of the lower court, and the judgment is therefore affirmed.

FLETCHER M. DOAN,
Associate Justice.

We concur.

RICHARD E. SLOAN,
Associate Justice.

GEO. R. DAVIS,
Associate Justice.

Street, C. J., took no part in the decision, having been of counsel.

370 In the Supreme Court of the Territory of Arizona.

CONSOLIDATED CANAL COMPANY, Appellant, *vs.* THE MESA CANAL COMPANY, Respondent.	Motion for Rehearing. Filed June 25th, 1898. Lloyd Johnston, Clerk.

Now comes the appellant in the above-entitled cause and moves this court to grant it a rehearing herein upon the grounds relied upon in its assignment of errors in this court and upon the errors herein reassigned:

1.

That the names and residence of the respective counsel for the opposing parties are as follows:

For the appellant, C. F. Ainsworth and Thos. D. Bennett, who reside in Phœnix, Arizona, and John D. Pope, Esq., who resides in Los Angeles, California; for the appellee, C. M. Frazier, who resides in Phœnix, Arizona.

2.

That the court erred in holding as a matter of law that the rights to enjoin the defendant company from the acts mentioned or from

any act in the control of its property and conduct of its business are necessarily those only which are conferred in the agreement entered into between the parties.

3.

That the court erred in holding that before the appellant
371 was entitled to receive and use any water through said canal it should first deliver at the division gates the 7,000 inches of water agreed upon as the capacity of the original Mesa canal.

4.

That the court erred in holding as a matter of law that by the terms of the agreement between the Mesa Canal Company and A. J. Chandler, referred to in said opinion, that said agreement expressly denies to and withholds from this appellant any right to use any of this water, either to turn wheels or to irrigate lands or for any other purpose, until after it is delivered, for the reason that said agreement must be construed in accordance with the intention of the parties at the time it was made, and the construction of this agreement by the acts of the parties, undisputed by any evidence in this cause, clearly demonstrates that the appellant had the right to usufruct any or all of the water running through the enlarged canal before it was delivered to the appellees, and that all that the appellees could claim under said contract was the full and complete delivery to the appellees of said water.

5.

That the court erred in holding as a matter of fact that this water was used after it was delivered.

6.

That the court erred in holding that it would be fair to suppose and presume that the appellant should deliver the appellees water at the elevation of the enlarged canal at the point of delivery, when the record clearly shows that the water was delivered in the
372 Mesa canal at a point five feet below the elevation of the water carried in what is known as the Consolidated or enlarged canal, and that the same had been received and taken by the appellees for a long time prior to the time they put in their checks and raised the water, so as to back up and impede and destroy appellant's water power, thereby again clearly demonstrating that the parties to said contract had construed the same by using and receiving their water at the same elevation the same had been run in their canal prior to the time of the enlargement of the consolidated portion thereof.

7.

That the court erred in holding that, without an express stipulation to that effect in the agreement, to compel the appellees to not only receive their water, but to continue to use it at an elevation of five feet lower than the rest of the water that had been carried that

far in the same canal, simply to accelerate the flow of water, and thus increase the carrying capacity of the canal in the interest of the other contracting party. If the other contracting party, the appellant herein, is to get no benefits at all from the water it carries in its enlarged canal, what coule have been the purpose of making the contract on its part?

We submit that this error seems to have crept into this part of the opinion as we see it, from the fact that none of this water belongs to the Mesa Canal Company until the same is actually delivered to it, any more than the water in the river would belong to the canal company until it had been severed from the other water in the river, and this was not done until the same is delivered to
373 it by the Consolidated canal.

8.

That the court erred in holding as a matter of law that the appellant herein was not entitled to enjoin the appellees from backing up water and destroying its water power after finding, as a matter of fact, that said checks being put in said Mesa canal above the head gates of the Consolidated canal and at a place where its water power was established did destroy said water power and did impede the flow of the water in said Consolidated canal.

We therefore submit that this court should grant this appellant a rehearing in this action.

Respectfully submitted.

C. F. AINSWORTH,
THOS. D. BENNETT, &
JOHN D. POPE,
Attorneys for Appellant.

In the Supreme Court of the Territory of Arizona.

CONSOLIDATED CANAL COMPANY, Appellant, *vs.* THE MESA CANAL COMPANY, Appellee.	Case No. 595. Filed August 3rd, 1898. Lloyd Johnston, Clerk.

Precept.

The Territory of Arizona to the sheriff of Maricopa county, Greeting:

Whereas on an appeal in the above-entitled cause by the
374 appellant herein the supreme court of the Territory of Arizona did, on the 11th day of June, 1898, render judgment in said cause affirming the judgment of the court below; and whereas the above-named appellant did on the 25th day of June, 1898, and within fifteen days after the rendition of said judgment by said supreme court, file in the office of the clerk of said court its certain motion for rehearing of said cause, a duly certified copy of which motion accompanies this precept:

Now, therefore, you are hereby commanded that you deliver said certified copy of the said motion for rehearing to C. M. Frazier, attorney of record for appellee, whose residence and place of business is Phœnix, Arizona, and that you make the return of this precept, with your proceedings thereunder entered thereon, to this court forthwith.

Witness the Honorable Webster Street, chief justice of the supreme court of the Territory of Arizona, and the seal of said court.

Done at Phœnix, the capital of Arizona, this 2nd day of August, 1898.

[Supreme Court Seal.]

LLOYD JOHNSTON,
Clerk of the Supreme Court of Arizona.

OFFICE OF THE SHERIFF, COUNTY OF MARICOPA.

I hereby certify that I received the within precept, together
375 with a certified copy of motion — rehearing, on the 3rd day of August, 1898, and personally served the certified copy of motion for rehearing on the 3rd day of August, 1898, on C. M. Frazier, attorney of record for appellee, by delivering him, in the city of Phœnix, county of Maricopa, Arizona Territory, the said certified copy of motion for rehearing.

Dated this 3rd of August, 1898.

L. H. ORME, *Sheriff*,
By J. E. BOYD, *Deputy*.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Appellant,
vs.
THE MESA CANAL COMPANY, a Corporation, Appellee.

Minute Entry. October 1st, 1898.

In this cause it is ordered that the motion for rehearing filed herein by appellant be, and the same is hereby, denied.

THE CONSOLIDATED CANAL COMPANY, a Corporation, Appellant,
vs.
THE MESA CANAL COMPANY, a Corporation, Appellee.

Minute Entry. October 1st, 1898.

In this cause Mr. C. F. Ainsworth, atterney for appellant, in open court gave notice of appeal from the judgment of this court herein to the United States Supreme Court and moved the court to fix the amount of the appeal bond; whereupon it was ordered that
376 the cost bond on appeal be fixed in the sum of one thousand dollars, and the clerk of this court is hereby required to retain the papers in said case for twenty days.

In the Supreme Court of the Territory of Arizona.

THE CONSOLIDATED CANAL COMPANY, Appellant, *vs.* THE MESA CANAL COMPANY, Respondent. } Notice of and Granting Appeal. Filed October 1st, 1898.

The above-named appellant, The Consolidated Canal Company, conceiving itself aggrieved by the order, judgment, and decree of this court entered on the 11th day of June, 1898, in the above-entitled cause, doth hereby appeal from said order, judgment, and decree to the Supreme Court of the United States, and it prays that this its appeal may be allowed, and that a transcript of the record and proceedings and papers upon which said order, judgment, and decree was made, together with the findings of fact by this court, duly authenticated, may be sent to the Supreme Court of the United States.

JOHN D. POPE,
C. F. AINSWORTH, &
THOS. D. BENNETT,
Attorneys for Appellant, The Consolidated Canal Company.

377 PHOENIX, ARIZONA, *October* 1, 1898.

And now, to wit, on the 1st day of October, 1898, it is by the supreme court of the Territory of Arizona ordered that the appeal to the Supreme Court of the United States in the above-entitled cause be, and the same is hereby, allowed as prayed for.

RICHARD E. SLOAN,
Presiding Judge.

In the Supreme Court of the Territory of Arizona.

THE CONSOLIDATED CANAL COMPANY, Appellant, *vs.* THE MESA CANAL COMPANY, Respondent. } Motion to Allow Findings of Fact. Filed October 1st, 1898.

Now comes the above-named appellant and moves this court to allow and sign the findings of fact and conclusions of law herewith tendered by the appellant herein as the findings of fact and conclusions of law of this court in said cause.

Respectfully submitted.

JOHN D. POPE,
C. F. AINSWORTH, &
THOS. D. BENNETT,
Attorneys for Appellant.

378 In the Supreme Court of the Territory of Arizona.

THE CONSOLIDATED CANAL COMPANY, Appellant, *vs.* THE MESA CANAL COMPANY, Respondent. } Findings of Fact. Filed October 1st, 1898.

This case was tried upon the pleadings and evidence in the district court of Arizona for the third judicial district, and judgment was rendered without any findings of fact, and the case was appealed to this court by the Consolidated Canal Company, and this court, having considered the evidence in the case, finds the facts as follows:

I.

Both parties in this action are corporations doing business in the county of Maricopa, Arizona Territory, organized for the purpose of conveying water from the Salt river and delivering the same to the consumers and users thereof along the line of their proposed and constructed canals, and both are engaged in the operation of such business.

II.

The appellee, being the owner of the Mesa canal, on January 10th, 1891, entered into a written contract with A. J. Chandler, authorizing him, his successors and assigns, to take possession of that portion of the Mesa canal between the point known as "Ayers' head gate" and a point on the Salt river where the said canal was taken out, and to reconstruct and enlarge the canal by in-
379 creasing its carrying capacity, and thereafter delegating to the said Chandler, his successors and assigns, the management and control of the part so to be enlarged and reconstructed. The said contract is in the words and figures following, to wit:

"This article of agreement made and entered into this 10th day of January, A. D. 1891, by and between the Mesa Canal Company, a corporation, duly organized, and legally existing under and by virtue of the laws of the Territory of Arizona, having its principal office and place of business at Mesa city, in the county of Maricopa and Territory of Arizona, party of the first part, and A. J. Chandler of the city of Phœnix, in the county and Territory aforesaid, party of the second part, witnesseth:

That whereas, the said party of the first part is an irrigating corporation, and as such is now the owner operating the Mesa canal in said county and Territory; and

Whereas, said party of the second part, desires to increase the size and capacity of said canal between the point in Salt river where the water is now taken out, or by consent of the directors of the Mesa Canal Company may hereafter be taken out, at a point in the Mesa canal known as 'Ayers' head gate,' so as to increase the flow of water through said portions of said canal as aforesaid, and for the purpose of the party of the second part, his associates and assigns

obtaining water thereby through said canal, and in order to have said canal increased in size, dimensions and capacity without cost or expense to the said party of the first part, and without in
380 any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal, and the water flowing through said canal, except as hereinafter provided; and

Whereas, at a meeting of the stockholders of the said Mesa Canal Company, the said party of the first part, duly called and legally held at the office in Mesa city, aforesaid, on the 10th day of January, A. D. 1891, the said stockholders, by vote thereof, viz: 221 votes for and 130 votes against, directed that this agreement in terms, words and figures as hereinafter expressed should be by said Mesa Canal Company entered into with the said A. J. Chandler, his associates and assigns, and that the president and secretary of the said Mesa Canal Company should execute said agreement on the part of said canal company under the corporate name and seal, and sign the same as president and secretary thereof.

Now, therefore, the Mesa Canal Company, party of the first part, for and in consideration of the sum of one dollar to it in hand paid, by the party of the second part, the receipt whereof is hereby acknowledged, and for the further consideration and purposes herein contained and expressed, does for itself and successors or assigns, hereby grnat unto the said A. J. Chandler, his associates, heirs or assigns forever, the following rights and privileges, upon the terms and conditions herein expressed, viz:

That the said A. J. Chandler, his associates, heirs or assigns, shall have the right and privilege of entering upon any and all of the following portions of the said Mesa canal at any time prior to
381 the first day of March, A. D. 1891, for the purpose of widening and enlarging and increasing the size and capacity of said Mesa canal between the point in Salt river, where the water is now, or may hereafter be taken out of said canal, at a point of said canal known as 'Ayers' head gate,' and enlarge and increase the size and dimensions of the main dam and head gates at the point of commencement of said canal in Salt river, and enlarge and increase the size and capacity of said Mesa canal so that the same when so enlarged and increased in size, shall have a carrying capacity, in addition to its present carrying capacity, not exceeding 40,000 inches of water, miners' measurement, and the said enlargement shall be fully made and completed by the 30th day of December, A. D. 1891. The present carrying capacity of the said Mesa canal for the purposes of this agreement, shall be 7,000 inches, miners' measurement.

All the costs and expenses of enlarging and increasing the size of said dam, head gate and canal, as aforesaid, shall be borne and paid by the said party of the second part, his associates, heirs and assigns, forever; and said enlargement shall be made without in any way interfering with any of the rights, titles, interests or privileges of said party of the first part in and to the said canal, and the water flowing through the said canal, except as hereinafter provided.

The party of the first part hereby reserves the right to further enlarge said portions of the Mesa canal whenever they deem it necessary to do so, provided that such enlargement shall not interfere with or lessen the rights or privileges herein granted
382 to the party of the second part, his associates or assigns.

The said party of the second part, his associates or assigns, shall have the right to turn the water out of the said Mesa canal for the purpose of enlarging the same, as aforesaid, from time to time, as the work may progress or require, but the said water shall not be turned out of said canal for a period exceeding fifteen days at any one time; after being turned out for fifteen days it shall be turned in again, and remain in said canal for a period of ten days each time it is turned in, unless permission is granted by the directors of the said Mesa Canal Company to turn the water out of said canal for a longer period than the time above specified; provided, it shall not be turned out at all between the first day of March, and the first day of November, without the consent of the directors of the Mesa Canal Company.

Said party of the second part, his associates and assigns shall, in enlarging said main dam, head gates and canals, as aforesaid, in all respects enlarge said dam, head gates and canal in a good, substantial and workmanlike manner, according to the most approved methods of constructing irrigating canals.

All suits, liabilities, costs, expenses of judgment, and all damages or loss incurred or sustained by the said party of the first part, caused by said enlargement, shall be borne by the party of the second part, his associates or assigns, forever; and all suits or proceedings against the party of the first part by reason of said enlargement to be defended at the expense of the party of the second part.
383 It is expressly understood and agreed by the parties hereto, their successors or assigns, that at all times when there is an abundance of water in Salt river liable to appropriation and flowage through said canal when so enlarged, then and at all times, the said party of the first part shall have the right to use from said canal in addition to the amount hereinbefore specified as the capacity of said canal, 2,000 inches of water, miners' measurement.

The management and control of the canal between the point known as Ayers' head gate to, and including the dam in Salt river when so enlarged as aforesaid, shall be in the party of the second part, his heirs, associates or assigns, provided that the party of the second part, his heirs, associates or assigns, shall before he or they are entitled to use any water through said canal, first *to* deliver to the party of the first part, their heirs or assigns, at the point in said Mesa canal known as Ayers' head gate, and shall continue to deliver the 7,000 inches of water, miners' measurement, above expressed as the carrying capacity of the said Mesa canal, or such portion thereof as may be apportioned to said Mesa canal by decree of any court. Provided, the stockholders who are now using or who may hereafter use water above the Ayers head gate, shall have their water delivered to them as at present, above Ayers' head gate aforesaid, or said stockholders shall have their water delivered to

them at the Ayers head gate with the other stockholders as they may demand; provided the Mesa Canal Company further agrees that in consideration of the said A. J. Chandler, his associates or assigns, delivering water at the aforesaid point of delivery
384 within the time specified, to pay to the said A. J. Chandler, his associates or assigns, the annual rental for said 7,000 inches of water forever, at $8.75 (eight and $\frac{75}{100}$ dollars) per share of stock payable semi-annually.

It is hereby agreed that if any disagreement arises between the parties hereunto in relation to the division of water, and any suit shall be instituted thereon by either party hereunto, the parties hereby mutually request the judge of the court in which such suit shall be pending to forthwith appoint some suitable and disinterested party to make the division of the water to the terms of this agreement, until said suit shall be settled either by decree of the court or agreement of the parties hereunto.

It is further expressly understood and agreed by the party of the second part that in case of any break in the canal or dam aforesaid, thereby causing said water to be turned out of said canal, then, and in every such case, the said party of the second part, his heirs or assigns, shall forthwith without delay cause said canal or dam to be repaired, and the water turned into said canal as soon thereafter as shall be possible to do.

Provided, further, that if the said party of the second part, his associates or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement, and shall be notified by the directors of the Mesa Canal Company of such failure or neglect to carry out the terms of this agreement and shall still neglect to carry out the terms of this agreement for
385 a period of ten days thereafter, or in such case as a break in said canal, head gate or dam, whereby the water is turned out for a period of five days, then, and at all such times, it is hereby agreed by the party of the second part, his heirs, associates and assigns, that the directors of the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, and the same shall become the property of the said Mesa Canal Company, and shall so remain until the said party of the second part, his associates, heirs or assigns, shall fully comply with the terms and requirements of this agreement, and shall then revert back to the party of the second part, his associates, heirs or assigns, and shall be and remain in the party of the second part, his heirs or assigns, so long as the terms of this agreement shall be by them complied with.

This agreement shall not give or convey to the party of the second part, his associates, heirs or assigns, any title or ownership in or to the capital stock of the said Mesa Canal Company, but shall only convey such privileges and rights as are herein mentioned.

The name of the Mesa canal shall not be changed, but shall always be known as the Mesa canal.

In witness whereof, the said Mesa Canal Company, party of the first part, has this 13th day of January, A. D. 1891, caused its cor-

porate name to be hereunto subscribed, and its corporate seal affixed, and these presents signed by its president and secretary, and the said party of the second part has signed these presents this
386 13th day of January, 1891.

Signed and acknowledged by:

THE MESA CANAL COMPANY,
By WILLIAM M. STANDAGE, *President.*
THE MESA CANAL COMPANY,
By WILLIAM J. LE BARON, *Secretary.*
A. J. CHANDLER."

III.

Chandler transferred his rights under the foregoing contract to the appellant, The Consolidated Canal Company, which last-named company enlarged and reconstructed the Mesa canal down to a place called the "division gates," which latter point had been, by mutual consent of the contracting parties, substituted for Ayers' head gate and the point of division of the waters and delivery by the appellant to the appellee of the water to which the latter is entitled.

IV.

In thus enlarging and reconstructing the canal, appellant raised the grade thereof for the purpose of carrying the water at a higher elevation, thereby enabling the canal to cover more and other lands. The elevation of the *garde* at the point where the division gates were located was about five feet above the grade at that point on the canal formerly owned by the appellee.

VI.

The purpose and desire of the appellant in so reconstructing the canal as to raise the grade was to secure through the enlarged canal a flow of water for irrigation and for other purposes for itself
387 and patrons. Under the terms of the agreement for such purpose it bore the expenses of the enlargement and the reconstruction of the canal to that point from the point of diversion on the river, and obligated itself before it should be entitled to receive or use any water through said canal to first deliver to the appellee at the point of diversion, at a certain annual rental, seven thousand (7,000) inches of water, which amount was in the stipulation agreed upon as the original carrying capacity of the Mesa canal.

VII.

Upon the construction of the division gates at the point named the appellant delivered the water to appellee at the division gates, thereby securing a waterfall of five feet in the water thus delivered.

VIII.

After appellant had delivered the water in the manner aforesaid for some years, the appellee built a dam in its canal a short distance

below the division gates that raised the water and caused it to flow through a lateral ditch, which enabled the appellee to irrigate some lands on which it had not been able to place water through its canal from its former elevation. The effect of this raise in the water was to reduce the fall at the division gates.

IX.

After appellee had built its dam and backed up the water, as aforesaid, appellant had constructed a water wheel and a mill for grinding grain to be driven thereby, and had erected them at the division gates, so that the wheel was turned by the water as
388 it fell from the division gate into the Mesa canal, a distance of about five feet. Afterwards appellant increased the height of the dam that it had formerly built to such an extent that it raised the surface of the water and backed the same up against the division gate in such manner as to destroy three and one-half feet of the five feet fall and totally destroyed the water power.

The water raised by the dam and the water affording the water power thus destroyed is the 7,000 inches of water which appellant is obligated by the terms of the agreement aforementioned to first deliver to the appellee before said appellant is entitled to receive or use any water through said canal.

X.

A further result of the erection of the water in appellee's canal below the division gates was to very slightly, if at all, impede the flow of water in appellant's canal above the division gates and thereby detract very slightly from the carrying capacity of appellant's canal.

XI.

The cost of the reconstruction of the canal from Ayers' head gate to the division gates exceeded ten thousand dollars and the water power created at the fall was equal to about forty-horse power.

As a conclusion of law from the facts aforesaid this court finds that the appellant, plaintiff in the court below, was not and is not entitled to an injunction to restrain the appellee from maintaining a dam in its canal, notwithstanding the effect of such dam
389 may be to slightly retard the flow of water in appellant's canal and diminish its capacity and also to destroy the water power which appellant had created in the water belonging to the appellee by raising the level of its canal.

FLETCHER M. DOAN,
Presiding Judge.

Service of the within by copy admitted this 23d day of September, 1898.

C. M. FRAZIER,
Att'y for Respondent.

390 *Citation.*

UNITED STATES OF AMERICA, *ss:*

To the Mesa Canal Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be holden at the city of Washington, in the District of Columbia, within sixty (60) days from the date hereof, pursuant to an appeal allowed by the supreme court of the Territory of Arizona, wherein The Consolidated Canal Company is plaintiff and appellant and The Mesa Canal Company is defendant and respondent, to show cause, if any there be, why the judgment in said appeal mentioned should not be corrected and speedy justice should not be done the parties on that behalf.

Witness the Honorable Melville W. Fuller, Chief Justice of the United States, this 16th day of November, in the year of our Lord one thousand eight hundred and ninety-eight.

FLETCHER M. DOAN,
Associate Justice of Supreme Court of Arizona.

(Endorsed:) Service of the within by copy duly admitted this 25th day of November, 1898. The Mesa Canal Comp'y, by C. M. Frazier, its attorney. Filed Nov. 17th, 1898. Lloyd Johnston, clerk.

391 In the Supreme Court of the United States.

CONSOLIDATED CANAL COMPANY, Appellant,
vs.
THE MESA CANAL COMPANY, Respondent.

Assignment of Errors. In Equity. Filed December 23d, 1898. Lloyd Johnston, Clerk.

Comes now the appellant and says that in the record and proceedings in the said cause there is manifest error in this, to wit, that upon the facts as they appear in the evidence and as found by the supreme court of the Territory of Arizona the decree of the court below should have been for the complainant and an injunction should have been granted as prayed in complainant's bill; and there is also error in this, to wit, that by the record aforesaid it appears that the supreme court of the Territory of Arizona ought to have reversed the decree for respondent and directed that an injunction issue as prayed by the appellant, and the said appellant prays that the judgment of the supreme court of the Territory of Arizona affirming the judgment of the lower court may be reversed, annulled, and altogether held for nothing, and that the supreme court of the Territory of Arizona be directed to take such action as may be necessary to the end that appellant may have the relief to which it is entitled.

C. F. AINSWORTH AND
JOHN D. POPE,
Attorneys for Appellant.

392 In the Supreme Court of the United States.

THE CONSOLIDATED CANAL COMPANY, Appellant,
vs.
THE MESA CANAL COMPANY, Appellee.

Appeal Bond. Filed December 27th, 1898. Lloyd Johnston, Clerk.

Know all men by these presents that we, The Consolidated Canal Company, a corporation, as principal, and A. J. Chandler and W. H. Code, both of the county of Maricopa and Territory of Arizona, being sureties for the said principal, are held and firmly bound to The Mesa Canal Company, appellee herein, in the sum of one thousand dollars ($1,000.00), to be paid to the said company, to its successors and assigns; which payment, well and truly to be made, we bind ourselves and each of us, our successors, heirs, executors, and administrators, jointly and severally, firmly by these presents.

And the conditions of the above obligations are such that the above-named appellant shall prosecute its appeal with effect, and if it fail to make its plea good shall answer and pay all costs, then this bond shall be void; otherwise shall remain in full force and effect.

In witness whereof The Consolidated Canal Company has caused these presents to be executed by its president, and the said
393 A. J. Chandler and W. H. Code have signed these presents this 19th day of December, A. D. 1898.

THE CONSOLIDATED CANAL COMPANY,
By A. J. CHANDLER, *Its President.*
A. J. CHANDLER.
W. H. CODE.

TERRITORY OF ARIZONA, *County of Maricopa,* } *ss:*

Before me, A. P. Shewman, a notary public in and for the county of Maricopa and Territory of Arizona, the above-named sureties on the above and foregoing bond, to wit, A. J. Chandler and W. H. Code, being each first duly sworn, on oath each for himself deposes and says that he is a resident, citizen, and freeholder of the county of Maricopa, and that he is worth the sum of one thousand dollars ($1,000.00), in property subject to execution, over and above all his legal exemptions.

A. J. CHANDLER.
W. H. CODE.

Subscribed and sworn to before me this 19th day of December, A. D. 1898.

A. P. SHEWMAN,
Notary Public.

[NOTARY SEAL.]

My com. expires May 16, 1902.

I, Fletcher M. Doan, presiding justice at the hearing in the supreme court of Arizona of the above on appeal, hereby approve of the within bond, both as to form and the sufficiency of the sureties thereof, this 24th day of December, A. D. 1898.

FLETCHER M. DOAN,
Presiding Justice of the Supreme Court of the Territory of Arizona in this Cause, Chief Justice not Sitting.

394 In the Supreme Court of Arizona.

THE CONSOLIDATED CANAL COMPANY, Plaintiff and Appellant,
vs.
THE MESA CANAL COMPANY, Defendant and Respondent.

Affidavit of C. F. Ainsworth. Filed Dec. 31st, 1898. Lloyd Johnston, Clerk.

TERRITORY OF ARIZONA, *County of Maricopa*, } *ss:*

C. F. Ainsworth, being first duly sworn, on oath deposes and says that he is one of the attorneys for the appellant in the above-entitled action; that on the 11th day of October, 1898, he deposited with the clerk of this court a bond on appeal to the Supreme Court of the United States in all respects the same as the bond now on file in said cause; that he received said bond aforesaid from Fletcher M. Doan, one of the associate justices of the supreme court of Arizona, by mail, in a letter bearing date Oct. 10, 1898, which said bond had been duly approved by the said Fletcher M. Doan, as associate justice aforesaid; that the letter above referred to is hereto attached and made a part of this affidavit; that this deponent was advised by the clerk of said supreme court, on or about the 10th day of December, 1898, that no bond on appeal was on file in his office in said cause; that thereupon deponent went to the clerk's office and with him made diligent search to find the bond filed, as aforesaid, but was unable so to do; that thereupon this deponent had drawn and properly executed the bond now on file in said cause; that
395 this deponent at once sent said bond to said Fletcher M. Doan for his approval, and as soon as he received the same from the said Fletcher M. Doan, as associate justice aforesaid, with his approval thereon, he at once filed said bond with the clerk of said supreme court, being the same bond now on file in said cause.

C. F. AINSWORTH.

Subscribed and sworn to before me this 31st day of December, A. D. 1898.

[Dist. Court Seal.]

EDWIN S. GILL,
Clerk District Court.

(*Copy of Letter.*)

Fletcher M. Doan, associate justice supreme court, Arizona Territory, judge second judicial district.

FLORENCE, ARIZONA, *Oct.* 10, 1898.

Hon. C. F. Ainsworth, Phœnix, Arizona.

DEAR SIR: Please find enclosed citation and appeal bond in case of The Consolidated Canal against Mesa Canal, with my approval of the bond. The statement of facts has not been handed or sent to me. If you will send them over, I will examine them, settle, and return them at once.

I received a letter from Judge Davis saying that he would
396 come to Florence November 10th and 11th to hear the Casa Grande Valley Canal case and the cases of Landers and Haines against Hammond, and asked me to have counsel in those cases notified of that fact. I advised Cassiday and Sniffen here and will advise Mr. Stone on his return. A letter received from him recently stated that he would be here by October 15th.

Yours very truly, FLETCHER M. DOAN.

397 *Clerk's Certificate.*

UNITED STATES OF AMERICA, } ss:
Territory of Arizona, }

I, Lloyd Johnston, clerk of the supreme court of the Territory of Arizona, by virtue of the foregoing appeal and in obedience thereto, do hereby certify that the foregoing pages, numbered from 1 to 396, inclusive, contain a true and complete transcript of the record and proceedings had in said court in the case of Consolidated Canal Company, appellant, *vs.* The Mesa Canal Company, appellee, as the same remain of record and on file in said office.

I also certify that the citation herein is a true and correct copy of the original citation issued by said supreme court of the Territory of Arizona.

In testimony whereof I have caused the seal of the said supreme court of the Territory of Arizona to be hereunto affixed, at the city of Phœnix, in the Territory of Arizona, this 3rd day of January, A. D. 1899.

Seal Supreme Court of Arizona.

LLOYD JOHNSTON,
Clerk of the Supreme Court of the Territory of Arizona.

Endorsed on cover: File No., 17,285. Arizona Territory supreme court. Term No., 200. The Consolidated Canal Company, appellant, *vs.* The Mesa Canal Company. Filed January 30, 1899.

IN THE

SUPREME COURT

OF THE

UNITED STATES.

OCTOBER TERM, 1899.

The Consolidated Canal Company,
Appellant.

vs.

The Mesa Canal Company,
Respondent.

BRIEF OF JOHN D. POPE, *Attorney for Appellant.*

STATEMENT OF THE CASE.

The Consolidated Canal Company brought an action against the Mesa Canal Company to restrain it from building a dam in its canal by which the water was raised and backed up against a waterfall which had been created by the Consolidated company and was being used to operate a water wheel and mill for the grinding of grain. The fall of the water was for the distance of about five feet and it was the mechanical equivalent of forty horse power. The court in which the action was brought refused the injunction; the Supreme Court of Arizona affirmed the decree of the lower court and plaintiff appealed to this court.

The facts of the case are few and simple and they are fully set forth in the findings of fact, commencing at page 202, folio 378 of the transcript. The Mesa company owned a canal which took water out of the Salt river, in Maricopa county, Arizona, and conducted it to the lands of the stockholders in and around Mesa city. The water was used for domestic and irrigation purposes. A. J. Chandler entered into a contract with the Mesa company, dated January 10th, 1891, under which he and his associates and assigns were given "the right and privilege to enter upon any and all of the following portions of the said Mesa canal * * * for the purpose of widening and enlarging and increasing the size and capacity of the said Mesa canal between the point in Salt river, where the water is now, and may hereafter be taken out for said canal and a point on said canal known as Ayers' headgate, and enlarge and increase the size and dimensions of the main dam and headgates at the point of commencement of said canal in Salt river, and enlarge and increase the size and capacity of said Mesa canal, so that the same, when so enlarged and increased in size, shall have a carrying capacity, in addition to its present carrying capacity, not exceeding forty thousand inches of water, miners' measurement. * * * The present carrying capacity of the said Mesa canal for the purposes of this agreement, shall be 7000 inches, miners' measurement." [Folio 381.] The contract further provides that: "Said enlargement shall be made without in any way interfering with any of the rights, titles, interests or priviliges of the said party of the first part (the Mesa company) in and to the said canal, and the water flowing through the said canal, except as hereinafter provided." [Folio 381.] The contract goes on to provide that: "The management and control of the canal between the point known as Ayers' headgate, to, and including the dam in Salt river when so enlarged, as aforesaid, shall be in the party of the second part (Chandler), his heirs associates or assigns, provided that the said party of the second part, his heirs, associates or assigns shall, before he or they are entitled to use any water through said canal, first deliver to the party of the first part, their heirs or assigns, at a point in said Mesa canal known as Ayers' headgate, and shall continue to deliver the 7000 inches of water, miners' measurement, above expressed as the carrying capacity of the said Mesa canal, or such portion thereof as may be apportioned to said Mesa canal by the decree of any court." [Folio 383.] The contract contains this further provision: "Provided, further, that if the said party of the second part, his heirs, associates, or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement, and shall be notified by the directors of the said Mesa Canal Company of such failure or neglect to carry out the terms of this agreement and

shall still neglect to carry out the terms of this agreement for the period of ten days thereafter, or in such case as a break in the canal, headgates or dam whereby the water is turned out for a period of five days, then, and at all such times, it is hereby agreed by the said party of the second part, his heirs, associates, and assigns, that the directors of the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, and the same shall become the property of the said Mesa Canal Company and shall so remain until the said party of the second part, his associates, heirs, or assigns, shall fully comply with the terms and requirements of this agreement, and shall then revert back to the party of the second part, his associates, heirs or assigns, and shall be and remain in the said party of the second part, his heirs or assigns, so long as the terms of this agreement shall be by them complied with." [Folio 384.]

The court found that by consent of the contracting parties the place known as the division gates was substituted for "Ayers' headgate" as the point where the water was to be divided and the portion belonging to the Mesa Canal Company delivered to it. [Folio 386.]

Chandler's rights under the foregoing contract were transferred by him to the Consolidated Company, and it took possession of the Mesa canal and enlarged and reconstructed it down to the place of the division gates. The grade of the canal was changed in such manner as that a water fall was created at the division gates, measuring five feet and equivalent to forty horse power. This water power was created by the water which the Consolidated Company discharged through its division gates into the Mesa canal, the water wheel being turned by the water before it reached the Mesa canal. The expenses of the reconstruction of the canal and of creating the water power was borne by the Consolidated Company, which was at all times in full possession of the canal and of the water until it reached the old Mesa canal below the division gates. [Fol. 386 *et seq*]

There were certain lands near the division gates which could not be irrigated from the old Mesa canal because of their higher elevation, and the Mesa Canal Company had never attempted to irrigate these lands; but when the Consolidated Canal Company had taken possession of the old Mesa canal and reconstructed it down to the division gates in such manner as to raise the water five feet above the level of the old Mesa canal, thereby creating the water power above mentioned, the Mesa Canal Company conceived the idea of taking advantage of the work and expenditure of the Consolidated Company and put a dam across the Mesa canal below the division gates so as to raise the water level three and one-half feet, thereby causing it to flow out and along a latteral ditch, which it constructed for the purpose, and

to reach lands that had never been within the flow of the Mesa canal. This destroyed the water power and compelled the Consolidated Company to apply for an injunction.

The injunction was denied, and the territorial supreme court affirmed the degree of the lower court.

Alleged Error in the Decree.

The sole errors alleged are that an injunction should have been granted, and that the supreme court of the territory erred in affirming the decree of the lower court.

Argument.

The opinion of the supreme court of Arizona is in the transcript, commencing at folio 462. From this opinion it appears that the action of the trial court was affirmed because, in the opinion of the territorial supreme court, the water power destroyed was not within appellant's canal; and also because "the destruction of the use of the water to turn the wheel" was not a "destruction of, or interference in, the use of water which appellant was entitled to receive and use." The language of the court on this point is as follows: "By a dam erected on its own property, the appellee is raising the water to the elevation that will enable it to use such water to cover lands that could not be irrigated at the former elevation. The destruction thereby of the water power would entitle the appellant to relief if the water power destroyed was one within the appellant's canal, or if the destruction of the use of the water to turn the wheel was destruction of, or interference in, the use of water which appellant was entitled to receive and use; but the evidence in the case discloses the fact that the water attempted to be used to produce the water power is the 7000 inches which, under the terms of the agreement, the appellant is obliged to deliver to the appellee before the appellant is entitled to reeeive or use any water through the enlarged canal." [Fol. 367] The idea of the court is that the waterfall is not in appellant's canal; if it were, appellant would be entitled to an injunction. The further idea of the court is that the waterfall consists of the drop, from the division gates of the appellant into the Mesa canal, of the 7000 inches of water which the Mesa Company is entitled to receive before appellant is entitled to use any water under contract; that the use of said 7000 inches of water to turn a water wheel before it is delivered into the Mesa canal is an invasion of the property rights of the Mesa Canal Company. If it were not for these two facts, says the court, appellant would be entitled to relief.

Is it true that the waterfall is not within appellant's canal? And is it also true that the Mesa Canal Company has such an exclusive property right in the 7000 inches of water that

appellant cannot use the water to turn a wheel for mechanical purposes while it is dropping from appellant's canal into the canal of the Mesa Company? The contract between the Mesa Company and Chandler does not provide in direct language where the legal title to the old Mesa canal from the river down to the division gates shall be, but it does provide that Chandler, his associates, heirs or assigns shall have the right and privilege of entering upon the canal and reconstructing it down to a certain point; that he and they shall have the management and control of the canal between those points, and shall deliver to the Mesa Canal Company at the lower end of the reconstructed canal 7000 inches of water. After this comes the provision that in case of failure to deliver the water "the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa canal without process of law, *and the same shall become the property of the Mesa Canal Company*, and shall so remain until the said party of the second part, his associates, heirs or assigns shall fully comply with the terms and requirements of this agreement, and shall then *revert back* to the party of the second part, his associates, heirs and assigns, *and shall be and remain in the party of the second part*, his heirs and assigns so long as the terms of this agreement shall be by them complied with." The right to take possession of the canal down to a certain point, to reconstruct it, to control and manage it, followed by a provision that in case of the failure to comply with certain terms the canal shall become the property of the first party, and then when the terms are again complied with, the title shall revert back to the second party, clearly means that the title to the canal is in the second party subject to the condition mentioned. The territorial supreme court seems to have taken that view of the contract, for otherwise it would not have been appropriate to say that appellant would have been entitled to an injunction if the waterfall had been "within the appellant's canal." The court must have understood that appellant had a canal in which the waterfall might have been placed. Besides, in finding IV, folio 386, this language occurs: "The elevation of the grade at the point where the division gates were located was about five feet above the grade at that point *on the canal formerly owned by the appellee.*" Upon this idea, if the fall had been placed above the division gates, and if the division gates had been placed upon the level of the old Mesa canal at the point where the water is delivered, appellant would have been entitled to an injunction; but because the waterfall is from the division gates into the Mesa canal, it is, therefore, outside of appellant's canal and appellant has no right to the water power. The findings of fact made by the court do not contain a particular description of the division

gates, but finding VII, folio 387, is as follows: "Upon the construction of the division gates at the point named, the appellant delivered the water to appellee at the division gates, thereby securing a waterfall in the water thus delivered." Finding IX, folio 387, speaking of the waterwheel and mill for grinding grain, says that appellant "*had erected them at the division gates, so that the wheel was turned by the water as it fell from the division gate into the Mesa canal, a distance of about five feet.* Afterwards appellee increased the height of the dam that it had formerly built to such an extent that it raised the surface of the water and backed the same up against the division gate in such manner as to destroy three and a half feet of the five-feet fall, and totally destroyed the water power." The finding then goes on to say that the water that was raised by the dam of the Mesa Canal Company "is the 7000 inches of water which appellant is obliged, by the terms of the agreement aforementioned, to first deliver to the appellee before said appellee is entitled to receive or use any water through said canal." The division gates, as the name implies, consist of a structure where the water in the canal of the appellant is divided so as to give the Mesa Canal Company the amount to which it is entitled. At folio 92 the engineer in charge of the division gates at the time of the trial, and at folio 99, the engineer who constructed them, gave descriptions of the division gates, from which it appears that the structure is about twenty-four feet wide; that the water drops to the lower level on what is called the apron nearer the upper than to the lower side of the structure; that is to say, the drop is from fourteen to eighteen feet from where the Mesa canal commences. But if this had not been so, it is impossible to understand how it would have made any difference, for, if the drop had been at the extreme lower end of the structure, still the drop in the water was obtained by means of the money and labor of the appellant in the reconstruction of the canal, which finding VI, folio 386, says was done "to secure through the enlarged canal a flow of water for irrigation and for other purposes for itself and patrons;" and finding VII says that "upon the construction of the division gates at the point named, the appellant delivered the water to appellee at the division gates, thereby securing a waterfall of five feet in the water thus delivered." The water which, under the contract, the Mesa Canal Company is entitled to receive, is on its way not only while it is flowing along appellant's canal, but while it is passing through appellant's division gates, and while it is dropping upon the floor constituting the lower portion of the division gates and until it is discharged into the Mesa canal. If appellant had the right to use it at any point, it had the right to use it wherever it saw fit, until it had come into the actual possession of the Mesa Canal Company. The water is within appellant's canal

and under its control at any and every point until it is actually delivered into the Mesa canal. This is so obvious that it admits of no discussion.

It is equally clear that the supreme court of the territory was wrong in attaching any importance whatever to the fact that the water which turned the wheel of appellant is the same water which appellant is under contract to deliver to the Mesa Canal Company. The language of the contract, found at folio 383, is that: "The party of the second part, his heirs, associates or assigns, shall, before he or they are entitled to use any water through said canal, first deliver to the party of the first part * * * 7000 inches of water," etc. The Mesa Canal Company distributes and uses water for domestic and irrigation purposes. This use of the water consumes it so that it cannot be made subject to further appropriation. Appellant is carrying water not only for domestic and irrigation purposes, but for other purposes, namely, the development of mechanical power to operate machinery, etc. Now, it is obvious, that what the contract meant to provide for was the securing of 7000 inches of water to the Mesa Canal Company, and to prevent any use of that water by the appellant for domestic or irrigation purposes which would deprive the Mesa Canal Company of a portion of the water to which it was entitled. To run the water over a wheel without consuming it is not to use the water within the meaning of the contract. It would make no difference whatever if the water should be run over a dozen wheels before reaching the Mesa canal. The word "use" in the contract is to be taken in the sense of "consume." The use of water by the Mesa Canal Company means its consumption because it is used for domestic purposes or for irrigation, and that is the sense in which the company employs the word when it puts a restriction upon Chandler and his assigns. The Mesa Canal Company is entitled to receive the full 7000 inches of water before the appellant has a right to consume any; appellant is entitled to consume only what is in excess of 7000 inches. But running the water over a wheel to develop mechanical power does not consume it, does not injure it in the least, and does not prevent its delivery to the Mesa Canal Company. It is a plain mistake as to the meaning of the contract to construe the language "before he or they are entitled to use any water through said canal" as meaning that the water shall not be required to do duty for mechanical purposes before it is subject to consumption for domestic uses and for irrigation. In one part of its opinion the court plainly concedes this, for it says that appellant would be entitled to relief "if the water power destroyed was one within appellant's canal." This clearly means that appellant has a right to use the water for mechanical purposes notwithstanding the fact that it is afterwards to be delivered to the Mesa company.

But apart from anything that was said by the supreme court of the territory in its opinion, we respectfully submit that appellant was clearly entitled to an injunction. The argument leading to this conclusion rests upon four propositions:

1. The 7000 inches of water which appellant is under contract to deliver to the Mesa Canal Company does not become the property of that company until it is actually received into that part of the canal which is in the possession and control of the company.

2. The water is subject to a second appropriation and may be used before delivery for any purpose that will not cause a material diminution in its quantity or deterioration in its quality.

3. After such second appropriation, the Mesa Canal Company, the first appropriator, had no legal right to change the place or manner of use of the water so as to injuriously affect the second appropriation.

4. For a change in the place and manner of use injuriously affecting the rights of the second appropriator, injunction is the proper remedy.

That part of the old Mesa canal which was given into the possession of appellant and which was reconstructed by it and is to remain in its exclusive management and control until default in the delivery of water, is the property of appellant. It is the Consolidated canal and not the Mesa canal. The provision that the reconstructed part of the canal shall become the property of the Mesa Canal Company in case of default as to the delivery of water, and remain the property of that company until appellant shall resume the delivery of water as agreed, and then to "revert back" to appellant, clearly shows the understanding of the parties as to the ownership of the canal. But if this were not so, appellant certainly has the exclusive use of the canal and is entitled to all the benefits of that use until it makes default, and this is amply sufficient for the purposes of this appeal. The canal was reconstructed down to the division gates by appellant for the purpose of reaching and irrigating lands that the Mesa canal had never reached and had never attempted to reach or irrigate, as well as for the purpose of creating a water power which of itself is of very great value. Now it is well settled that an appropriator does not become the owner of the water which he appropriates until it is in his actual possession.

In Saint *v.* Guerrerio, 17 Colo 448, 453, it is said:

"Interference with the prior right of a party to the use of water for irrigation is unlike most private injuries on which relief may be had by injunction. Priority of right to the use of water from a natural stream is a right peculiar in its nature. A party entitled to such priority, unless he can show that he is entitled

to all the water of a natural stream, cannot in the nature of things, identify certain specific water as belonging to himself while the same is running in the natural channel. Being entitled only to a certain quantity of the water, less than the whole, it is only after a proper diversion of such quantity into his own separate ditch or lateral that the prior appropriator can be said to have title, in kind, to the specific water thus diverted."

In Kidd *v.* Laird, 15 Cal. 161, 180, we find this language:

"This court has never departed from the doctrine that running water, so long as it continues to flow in its natural course, is not, and cannot be made the subject of private ownership. A right may be acquired to its use, which will be regarded and protected as property; but it has been distinctly declared in several cases that this right carries with it no specific property in the water itself. We are not called upon to determine the character of the property which the owner of a ditch has in the water actually diverted by and flowing in his ditch. With reference to such water, his power of control and right of enjoyment are exclusive and absolute, and it is a matter of little practical importance whether in a strict legal sense, it be or be not private property. In regard to the water of a stream, his rights, like those of a riparian owner, are strictly *usufructuary*, and the rules of law by which they are governed are perfectly well settled."

In Parks C. & M. Co. *v*, Hoyt, 57 Cal. 44, 46, Mr. Justice McKinstry, speaking for the court said: "Nevertheless, although such appropriator may be entitled to flow of the stream undiminished, the water in the stream *above his ditch* is not his personal property. The stream as yet flows in its natural course —a part of the realty. The appropriator certainly does not become the owner of the very body of the water until he has obtained control of it in conduits or reservoirs, created by art, or applied to the purpose of leading or storing water by artificial means." And in McGuire *v.* Brown, 106 Cal. 660, 669, it is said: "It must be remembered that the appropriator is not the owner of the 'very body of the water,' until it passes into the appliances he has provided for its reception."

It is true that the first appropriator of water is entitled to the exclusive use of it up to the amount embraced in his appropriation, but it is also true that the second appropriator can take out the water above as well as below the first appropriator, and can use it for any lawful purpose. The limit, and the only limit, which the law places upon the exercise of this right is that the second appropriator must not interfere with the use of the water by the first appropriator, to the extent of his appropriation. Section 175 of Kinney on Irrigation, says: "The rights of the prior appropriator being fixed by the extent of his appropriation others may locate on the stream, either above or below, and take

all the water there is left flowing in the natural channel, provided no interference with or injury of the rights of the prior appropriator is thereby caused. * * * In all controversies between prior and subsequent appropriators of water, the question is, has the use and enjoyment of the water for purposes for which the first appropriator claims it, been impaired by acts of the subsequent claimant?"

Black's Pomeroy on Water Rights, section 90, states the law as follows:

"A prior appropriation having been made on a public stream, the residue or surplus remaining of its waters, not embraced within the amount of such prior appropriation, may afterwards be appropriated, either above or below on the same stream by other parties, if no interference with the rights of the prior appropriator is thereby caused. The doctrine extends to and admits of a succession of such appropriators; and there is no limit to its operation except such physical limits as arise from the size of the stream itself and the amount taken by each claimant."

In Butte C. & D. Co. *v.* Vaughn, 11 Cal. 143, Mr. Justice Field, delivering the opinion of the court, said: "The first appropriator of the water of a stream passing through public lands in this state has a right to insist that the water shall be subject to his use and enjoyment to the extent of his original appropriation, and that its quality shall not be impaired so as to defeat the purpose of its appropriation. To this extent his rights go, and no further. In subordination to these rights, subsequent appropriators may make use of the channel of the stream as they think proper, and they may mingle with its waters other waters, and divert an equal quantity, as often as they choose. Whilst resting in the perfect enjoyment of their original rights, the first appropriators have no cause of complaint."

In Nevada Water Company *v.* Powell, 34 Cal. 119, Mr. Justice Sawyer, in discussing the rights of miners who had made successive appropriations of the waters of a stream, said: "If plaintiff's right was thus limited to the extent and mode of the actual appropriation, * * * then the defendants had a right to take up the mining claims on the stream above, and work them in any manner which would not encroach upon the rights of the plaintiff, as they were actually vested and enjoyed at the time of locating such mining claims."

In Hill *v.* Smith, 27 Cal. 476, the doctrine was stated as follows:

"In controversies between prior and subsequent appropriators of water, the question is, has the use and enjoyment of the water, for the purposes for which the first appropriator claims it, been impaired by acts of the subsequent claimant?"

In Atchison *v.* Peterson, 20 Wall, 507, Mr. Justice Field delivering the opinion of the court said:

"What diminution of quantity or deterioation in quality will constitute an invasion of the rights of the first appropriator, will depend upon the special circumstances of each case, considered with reference to the use to which the water is applied. A slight deterioration in quality might render the water unfit for drink or domestic purposes, whilst it would not sensibly impair its value for mining or irrigation. In all controversies, therefore, between him and parties subsequently claiming the water, the question for determination is necessarily whether his use and enjoyment of the water to the extent of his original appropriation have been impaired by the acts of the defendant."

It should be borne in mind that the rules that govern the rights of the successive appropriators are the same, whether the appropriation is made for the purpose of mining or operating machinery. [See Basey *v.* Gallagher, 20 Wall, 670; and Ortman *v.* Dixon, 13 Cal., 33.]

In Black's Pomeroy on Water-rights, section 72, we find the following: "Of course the mere use of the water by another person, when its quantity is not thereby lessened nor its quality deteriorated, is no injury to a prior appropriator. If, therefore, A owns a ditch and has the right to divert the water of a certain stream by its means, and B subsequently takes water from the same stream at a place above the head of A's ditch and uses it for his purposes, but returns its back undeteriorated in quality in the stream before it would reach A's ditch, or even into the upper part of the ditch itself at a point before A has use for it, no injury is thereby done to A, and he has no cause of action against B therefor."

This is the precise point decided by the supreme court of California in Union Water Company *v.* Crary, 25 Cal. 504. And the same decision was made by the supreme court of the territory of Arizona in the case of Austin *v.* Chandler, 42 Pacific Rep. 483. The syllabus contains a correct statement of the point decided, and is as follows: "An injunction does not lie at the instance of a prior appropriator of the water of a river through an irrigation ditch, to restrain a subsequent appropriator further up the stream from diverting water from the river, and after using it turning it into complainant's ditch instead of returning it into the river above the opening of complainant's ditch, where it appears that the water is turned into such ditch above the point where it is to be used by complainant, and that complainant has the same quantity as he would have if defendant returned the part used by him into the river."

We think the proposition is clearly established that appellant had the right to bring the 7000 inches of water which it was under contract to deliver to the Mesa Canal Company to a

higher elevation, and to create a water power by the drop of the water into the Mesa canal. This is a second appropriation of the water, and is made in such manner as not to injuriously affect the Mesa Canal Company.

The placing of a dam in the Mesa canal so as to raise the water after delivery into that canal three and a half feet in order to cause it to flow out on lands that had never been irrigated from the Mesa canal,and which could not have been irrigated from that canal as the Mesa Canal Company had constructed it, is a distinct change of the place of use; and the law is that the first appropriator cannot change the place of use if he thereby injuriously affects a subsequent appropriator. As the authorities are uniform upon this subject, it will not be necessary to cite many of them. In Columbia Min. Co. *v.* Holter, 1 Mont. 296, it was held that where A appropriated the waters of a creek at a certain point in 1865, and B appropriated the same water above A in 1867, for the use of a mill, and returned the water into the creek so that A had the benefit thereof, it was held that A had no right to change the point of diversion of the water in 1869, and appropriate above B's mill, thereby depriving B of the use of the water. In Cole *v.* Logan, 24 Ore. 304, it appeared that two parties who desired to take all the water from a creek for the irrigation of their respective ranches, united and built a dam across the creek and diverted all the water, one taking a part and the other another part; and one of them allowed the waste water to flow back into the creek above the place where defendant had a ditch so that defendant obtained a certain amount of water which was sufficient to irrigate his lands. The defendant went above the dam and took out the amount of water necessary to irrigate his lands, thereby depriving plaintiffs of the use of it. Defendant was the prior appropriator, but the court held that he could not change the point at which he diverted the water so as to injure the subsequent appropriators. In the opinion it is said: "The defendant, having made the diversion of the water in 1871, could not thereafter change the point of his diversion if it injuriously affected the right of any subsequent appropriator."

In Butte T. M. Co. *v.* Morgan, 19 Cal. 609, it was held that a person appropriating and diverting water of a stream at a given point, cannot afterwards change the point of diversion to the prejudice of a subsequent appropriator.

In section 1541 of Kinney on Irrigation, it is said:

"But on the other hand the mode of appropriation, or point of diversion, cannot be changed by the first appropriator so as to interfere with the rights acquired by subsequent appropriators prior to the change. In section 69 of Black's Pomeroy on Water-rights, after stating the general rule as laid down in Kidd

v. Laird, 15 Cal. 161, that, after an appropriation has been made, the place and character of use may be changed, the author says the proper limitation upon this doctrine was stated in the subsequent case of Butte T. & M. Co. *v.* Morgan, 19 Cal. 609, which held that a party appropriating and diverting water at a certain point cannot afterwards change the place of diversion so as to prejudice another person whose rights have subsequently accrued."

In Union Mill & Mining Co. *v.* Dangberg, 81 Fed. Rep., at page 105, Judge Hawley, uses this language:

"When the right of complainant attached and became fixed, the the respondents could not in any manner encroach upon or interfere with it by afterwards extending and enlarging their own rights beyond their first appropriation, by the acquisition of additional land, and the construction of ditches or other means to convey additional quantities of water away from said river to any portion of their subsequently acquired lands. No rule of law is better settled, oftener applied, more rigidly enforced or based upon stronger principles of equity, justice, and right in regard to the beneficial use of water, and the rights acquired by a priority of appropriation. The right of the first appropriator is fixed by his appropriation, and when others locate upon the stream, or appropriate the water, he cannot enlarge his original appropriation or make any change in the channel, to their injury. Each subsequent locator or appropriator is entitled to have the water to flow in the same manner as when he located, and may insist that the prior appropriators shall be confined to what was actually appropriated or necessary for the purpose for which they intended to use the water. In other words, a person appropriating a water right on a stream already partly appropriated acquires a right to the surplus or residium he appropriates; and those who acquired prior rights, whether above or below him on the stream, can in no way change or extend their use of the water to his prejudice, but are limited to the rights enjoyed by them when he secured his." For this statement of the law the judge cites a long list of authorities, the last of which is Gould on Waters, section 231, where the doctrine is very clearly and forcibly stated.

Enough has been said to show that the raising of the water level in the Mesa canal to the destruction of the water power of the appellant was a clear violation of appellant's legal rights. It only remains to consider the question of the proper remedy.

It cannot be necessary to cite many authorities to the point that injunction is the proper remedy in cases like this. Gould on Waters, section 543, says: "Under the customs of miners, adopted in the mining states and territories and allowing priority of right to the first appropriator of a stream, which doctrine

has been extended by the courts to appropriations of streams flowing through public lands, for any beneficial use, an appropriator of such a stream, in whole or in part, will be protected by injunction in the enjoyment of that portion of the stream to which he is entitled, and to prevent wrongful acts acquring the appearance of right by lapse of time."

Beach on Injunctions, section 305 says:

"*Injury which is irreparable:* Where the injury complained of is such as to destroy plaintiff's property, or render it entirely worthless, for his purposes, it may properly be regarded as irreparable. And where the substance of plaintiff's estate or inheritance is taken in part, for example by the construction of a tunnel through his land, the injury is deemed irreparable without regard to defendant's solvency."

Kinney on Irrigation, section 332, says:

"The diversion of a water-course, or of water from those rightfully entitled to the use thereof, is a private nuisance. A person who has a clear right to a certain amount of water flowing in a stream by virtue of an appropriation of the same is entitled to protection against acts which materially diminish the quantity of the water to which he is entitled, or materially deteriorate its quality to such a degree that it injures it for the use to which he desires to apply it. Equity affords the appropriate remedy against the wrong doer by way of an injunction against such wrong." It is obvious that an appropriation of water for a mechanical use is entitled to the same protection as if it was intended for irrigation, and that an interruption of the flow of the water is substantially an interference with the rights of the appropriator.

Lyon *v.* McLaughlin, 32 Vt. 423, was an action brought for the invasion of the right to the use of the water course, which was threatened or intended. The court says:

"It would seem to be well settled, as shown by the text books and the cases, that when the invasion of a right in this kind of property is threatened and intended, which is necessarily to be continuing and operative prospectively and indefinitely, and the extent of the injurious consequence is contingent and doubtful of estimation, the writ of injunction is not only permissible, but is the most appropriate means of remedy. It affords, in fact, the only adequate and sure remedy; for the very doubtfulness as to the extent of the prospective injury, and the impossibility of ascertaining the measure of just reparation, renders such injury irreparable, in the sense of the law relating to this subject."

In Kimberly & Clark Co. *v.* Hewitt, 75 Wis. 371, 44 N. W. 303, it was held that:

"A complaint which alleges that defendants threatened to divert the water from plaintiff's water power, that defendants claimed the right and had the ability to do it, and that they will

do so unless restrained, presents a case for the exercise of equitable jurisdiction to prevent a threatened injury."

The City of Emporia *v.* Soden, 25 Kas. 410, is a very instructive case, and is directly in point here. The city of Emporia sunk a well from seventy-five to one hundred feet from the river, where Soden had a dam for the creation of water power to operate his mills. The object of the well was to provide water for the inhabitants of the city. At a depth of about twenty-five feet the well struck a stratum of gravel, which extended to the pond, and the water flowed in freely. In addition to this a pipe was put in from the pond to the well, to be used in cases of fire when the demand upon the well would be suddenly increased. Soden brought an action for injunction, which was granted, and the lower court was affirmed in an opinion written by Judge Brewer. In the opinion we find this language:

"Has the plaintiff any remedy for this direct and indirect abstraction of water, and consequent diminution in amount of power? The amount of water now used by the city, and its present effect upon the plaintiff's business, do not determine the question of right or remedy. The continuance of the water works, as well as the growth of the city, will increase the demand; and if the present abstraction can be sustained, there is no legal principle upon which the future and larger abstraction can be restrained. The fact is obvious that by means of the pipe running into the pond, there will be, in case of fire, a direct abstraction of water, and the fact is found that by means of the well there is an indirect abstraction. The flow of water is, as heretofore stated, thus interfered with, and the power diminished. It is in evidence that, while at certain seasons of the year the water supply is more than enough for all of plaintiff's present uses, and that during such seasons the consumption of water in the city would work no present injury, yet at other seasons the supply is insufficient, and some or all the mills are compelled to stop running. Hence, naturally, any abstraction of water would tend to increase the time during which his mills must be idle, and therefore work present and positive injury—an injury increasing with the increasing consumption by the city. Further, if plaintiff is entitled to this water power at all, he is entitled to all of it, and may increase the number of mills, or amount of machinery propelled by it, until his uses shall wholly exhaust it, so that matters of amount really fade out of sight, and the question is one of right and title."

There are many decisions in California to the same effect. In Richards *v.* Dower, 64 Cal. 602, it was held that:

"The solvency of a person who is about to construct a tunnel through the land of another does not affect the right of the latter to an injunction. The injury would be irreparable in its nature."

In Moore *v.* Clear Lake Water Works, 68 Cal. 146, the syllabus is as follows:

"In an action to restrain the diversion of water from a stream, the complaint alleged that the plaintiff was the owner and in possession of a certain ditch connected with the stream, and that he had a right to appropriate for use and distribution so much of the water of the stream as the ditch had capacity to carry. Held, that an allegation to the effect that the plaintiff was in a position to use or distribute the water was unnecessary.

"In such an action, where the plaintiff complains of a continuous wrongful act and consequent infringement of his rights, an injunction will be granted, although there is no allegation or proof of actual damage."

In Spargur *v.* Heard, 90 Cal. 222, it was held that:

"In order to sustain an injunction restraining the diversion of water belonging to the plaintiff, it is not necessary that any actual damage by reason of the diversion should be alleged, or proved, or found, and a failure to find upon the issue as to the extent of actual damage is immaterial if no damages are granted.

"Where it appears that the plaintiff has acquired a right to appropriate the waters of a stream as against the defendants, who are lower riparian owners, and that the defendants have wrongfully obstructed the flow of water into the plaintiff's ditch and threatened to continue to do so, the plaintiff is entitled to a perpetual injunction, without proof of damages."

And in the very next case, Mott *v.* Ewing, 90 Cal. 231, it was held that:

"Where the facts found show that, if not prevented, the continuous trespass of the defendants might by time ripen into a right adverse to the plaintiff, the plaintiff is entitled to an injunction to protect the superior right without proof or finding of damages, and the failure to find upon an issue tendered, as to damage resulting from the trespass, is immaterial, if no damages are given by the judgment."

Cresent City W. & L. Co. *v.* Simpson, 77 Cal. 286, was an action brought to enjoin defendants from removing certain moorings, anchors and buoys which were appurtenant to a wharf of which the plaintiff was lessee. One of them had been removed by the defendants and the removal of others was threatened. The court held that an injunction was the appropriate remedy, and announced these principles:

"When an injunction is sought to restrain irreparable injury to the inheritance, from a trespass threatened in the nature of waste, the complaint need not allege the insolvency of the defendant."

In Noonan *v.* Albany, 79 N. Y. 470, it was held that a riparian owner was entitled to an injunction restraining a lower appropri-

ator from interfering with the flow of the water in a stream and to compel him to remove any obstructions he had placed in the channel of the stream by which the water had been thrown back on the plaintiff's land.

In U. S. F. L. & E. M. *v.* Gallegos, 89 F. R. 769, 773, Judge Thayer said: "A suit in equity is generally the only adequate remedy for trespasses continually repeated, because constantly recurring actions for damages would be more vexatious and expensive than effective. 2nd Beach on Inj. Sec. 1129, 1146; Tallman *v.* Railroad Co., 121 N. Y. 119, 123, 23 N. E. 1134; Uline *v.* Railroad Co., 101 N. Y. 98, 122; 4 N. E. 536; Galway *v.* R. R. Co., 126 N. Y. 132, 145; 28 N. E. 479."

In Stone *v.* Lumber Co. 59 Mich. 24; 26 N. W. 216, it was held that an injunction would lie to prevent the flooding of plaintiff's land, if it appeared that the threatened injury is of a character to render the property comparatively worthless for the purposes to which it was best adapted, and for which it was intended by the owner, without regard to the amount of immediate damage sustained.

Bemis *v.* Upham, 13 Pick. 169, was a case where an injunction was sought to prevent the keeping up of a mill dam which set the water back so as to overflow the plaintiff's dam higher up. It was admitted by the defendant in that case that the grievance complained of was a nuisance, but it was objected that there was a adequate and complete remedy at law. The court held that a decree in equity was the only sufficient remedy inasmuch as such decree could extend to all parties having an interest, and bind them, effectually forever.

Citations upon this point might be extended indefinitely, but the foregoing ought to be sufficient. The remedy by injunction is in universal use in the Pacific states and territories where irrigation is practiced to settle disputes respecting adverse claims to water, and it is not believed that counsel for appellee will make any contention as to the remedy.

Respectfully submitted,

JOHN D. POPE,
Attorney for Appellant.

IN THE

SUPREME COURT

OF THE

UNITED STATES.

OCTOBER TERM, 1899.

The Consolidated Canal Company,
APPELLANT,

vs.

The Mesa Canal Company,
RESPONDENT.

REPLY BRIEF OF JOHN D. POPE, Attorney for Appellant.

The assignment of errors is as full and explicit as it was possible to make it.

There is no attempt by counsel for respondent to controvert any of the legal propositions advanced in appellant's opening brief, namely, that neither the canal above the division gates nor the water in that part of the canal is the property of respondent or is in any manner subject to its control; that the water in the canal before it reaches that part of it which belongs to respondent, the Mesa Canal Company, is subject to appropriation for any useful purpose which does not either di-

minish the quantity or deteriorate the quality of the water; that after the Consolidated Canal Company had created the water power at great expense the Mesa Canal Company had no right to change the place or manner of the use of the water so as to destroy the water power; and that injunction was the proper remedy. Counsel for respondent had the best of reasons for not combating any of these propositions; they are too well founded in law.

But counsel say that the contract between Chandler, the predecessor in interest of the Consolidated Canal Company, and the Mesa Canal Company, contained a provision that in doing what Chandler and his assigns were authorized to do, ~~provided that~~ it was to be done "without in any wise interfering with the rights, titles, interests or privileges of said party of the first part (the Mesa Canal Company) in and to said canal, and the water flowing through said canal, except as herein provided." This language cannot be understood as restricting the right of the Consolidated Canal Company to reconstruct the canal above the division gates nor to prevent the title to that part of the canal from vesting in the Consolidated Canal Company; for these things are plainly provided for in the contract. The right which the Mesa Canal Company had to the water was the use of it for irrigation purposes on the lands on which they had formerly used it and by the means which they had formerly employed, together with the right to change the manner and place of use, provided that in so doing no other appropriation of the water should be interfered with. It is manifest that the Consolidated Canal Company had as much right to use the water to turn a wheel placed in the division gates as it would have had to place an undershot wheel a mile higher up and have it turned by the flow of the water in the canal. Such use of the water could not in any manner affect any appropriation or use of the water which the Mesa Canal Company had made prior to that time. If the Mesa Canal Company had the right to change the place of use of the water to other lands than those on which it had formerly been used or to change the means of conducting it to the place where it was to be used,

all without reference to its effect upon that portion of the canal which was given over to the Consolidated Canal Company, it would follow that the Mesa Canal Company might take the water out of the river above the head of the Consolidated Canal and never allow it to come into its possession. But this would be as much against the plain intent of the contract between the parties as it would be a violation of the elementary principles of law respecting successive appropriations of water. The oldest appropriator cannot change the manner or place of use to the detriment of a junior appropriator.

The law in the arid regions of the country encourages the use of water in such manner as will render it most beneficial to the people; and it is preposterous for parties who have appropriated water for irrigation to object to its being used to operate machinery before it comes into their possession.

A material error of fact occurs in respondent's brief at page 6, where in speaking of backing up the water to a higher level than it had ever been raised before for the purpose of turning it into a new lateral ditch, counsel say that the Mesa Canal Company "was thereby enabled to use the water upon the lands upon which it had originally been used before said contract was entered into." There was no finding of fact by the court below to that effect, but if the court should look into the evidence it would see that while it is true that by taking possession of the water-fall created by the Consolidated Canal Company and constructing a new ditch at a higher elevation, the Mesa Canal Company could carry the water to some of the lands which it had formerly irrigated by means of a lateral ditch taken out at a lower level, because water will always flow down hill; but it will also appear that the chief object of the new lateral ditch at a higher level, which was so placed as to destroy the water power, was to convey water to lands where it had never been used before. In other words, the Mesa Canal Company proposed to change the manner and place of the use of the water to which it was entitled, regardless of the damage done to the water power which the Consolidated Canal Company had at great expense produced and which it intended to use for a beneficial purpose.

On page 5 of their brief, counsel for respondent say:

"If the appellant raised the grade of the canal by its reconstruction, such elevation should inure not only to the benefit of the Consolidated Canal Company, but also to the appellee. We deny any right or authority under or by virtue of said contract, or by any agreement, for the plaintiff to establish any water power or machinery on or along said canal or at said division gate."

If this is true, there is nothing to prevent the Mesa Canal Company from putting its own machinery in at the place of the water-fall to the exclusion of the Consolidated Canal Company which created it; and if there had been a fall established anywhere on that portion of the canal which is ceded to the Consolidated Canal Company, the Mesa Canal Company might put in machinery there and use it as it saw fit. In other words, the Mesa Canal Company could use or destroy as it might elect any work which the Consolidated Canal Company could do under the contract. With just as much reason it might be claimed that the Mesa Canal Company could turn the Consolidated Canal Company out of possession entirely, whenever it found it convenient or profitable to do so.

Speaking of the contract, on page 7 of their brief, counsel say: "It expressly denies to the appellant any right to the use of this water either to turn wheels, irrigate lands, or for any other purpose until it is delivered, and we take it that after it is delivered appellant has no right to use it." It has been shown that the contract does not do anything of the kind. The right of the Consolidated Canal Company to use any of the water to which the Mesa Canal Company is entitled, is provided against in the contract, but this denial, as we have shown, refers to such use of the water as would diminish its quantity or deteriorate its quality and thereby injuriously affect the appropriation which the Mesa Canal Company already had to the water.

On page 9 of their brief counsel for respondent refer to an alleged offer by the Mesa Canal Company to put in a flume above the water-fall and take out of the ditch whatever water it wanted to use and thereby do away with the necessity of

backing up the water below the fall and destroying the water power. If this court should deem it proper to look into the evidence to see if that claim is true as stated by counsel, notwithstanding the conflict in the evidence on the point, it would only be necessary to remember that if the Mesa Canal Company can take out part of the water above the fall and thereby diminish the power, they can take it all out and destroy the power altogether. They have the same right to destroy the power by backing up the water as they have to go above the fall and take the water out and destroy the power in that way. It ought not to be necessary to discuss such a proposition.

Finally, counsel for respondent say that the stockholders of the Mesa Canal Company ought not to be compelled to pay for water to use on their own lands near the division gates. In order not to have to do that, they propose to take advantage of the large expenditure of money by the Consolidated Canal Company made expressly to create a water power, even if they should thereby destroy the water power, and this without consulting the Consolidated Canal Company. This is but another form of denying the proposition that water is subject to successive appropriations. The right to make the second appropriation without diminishing the quantity or deteriorating the quality of the water carries with it the right to enjoy the benefits of the second appropriation. The law protects this right as much as it does the first appropriation. If the Mesa Canal Company had respected this familiar legal principle, there would have been no occasion for litigation between the parties to this action.

Respectfully submitted,

JOHN D. POPE,

Attorney for Appellant.

Office Supreme Court U. S.
FILED
DEC 11 1899
JAMES H. McKENNEY,
Clerk

No. 200.

Brief of Garland & Wright for Appellees.

BRIEF OF APPELLEE.

Filed Dec. 11, 1899.

Supreme Court of the United States.

October Term, 1899.

No. 200.

THE CONSOLIDATED CANAL COMPANY,
Appellant.

vs.

THE MESA CANAL COMPANY,

APPEAL FROM THE SUPREME COURT OF THE TERRITORY OF ARIZONA.

(17,285.)

C. M. Frazier
~~FRAZIER, McCORMICK & WILCOX'N.~~
Rufus C. Garland
W. W. Wright, Jr.
Attorneys for Appellees.

(17,285.)

Supreme Court of the United States.

October Term, 1899.

No. 200.

The Consolidated Canal Company, Appellant,

vs.

The Mesa Canal Company.

The following assignment of error found in the record of this case on page 208, folio 391, notifies this Court why this case is before it:

"In the Supreme Court of the United States.

CONSOLIDATED CANAL COMPANY,
Appellant.

vs.

THE MESA CANAL COMPANY,
Respondent.

Assignment of Errors.
In Equity.
Filed December 23, '99.
Loyd Johnson,
Clerk.

Comes now the appellant and says that in the record and proceedings in the said cause there is manifest error in this, to wit, that upon the facts as they appear in the evidence and as found by the Supreme Court of the Territory of Arizona, the decree of the Court below should have been for the complainant and an injunction should have been granted as prayed in complainant's bill; and there is also error in this , to wit, that by the record aforesaid it appears that the Supreme Court of the Territory ought to have reversed the decree for respondent and directed that an injunction issue as prayed by the appellant, and the said appellant prays that the judgment of the Supreme Court of the Territory of Arizona affiming the judgment of the lower Court may be reversed, annulled, and altogether held for nothing and that the Supreme Court of of the Territory of Arizona be directed to take such action as may be necessary to the end that the appellant may have the relief to which it is entitled.

C. F. Ainsworth and
John D. Pope,
Attorneys for Appellant."

This assignment of error, if such it can be called, complains that upon the facts as they appear in the evidence, and as found by the Supreme Court of the Territory of Arizona, the decree of the Court below should have been otherwise than what it was. There is no assignment of any error of law, or any specific assignment either as to law or fact.

Under rule 21 of this Court, and sections 997 and 1012 of the Revised Statutes of the United States, 1878, this Court has held that the assignment of error made on appeal from the District Court to the Supreme Court of a Territory cannot be accepted on appeal to this Court as an equivalent of the assignment of error required by the statute.

Benites vs. Hampton, 123 U. S. 519.

Under the ruling in Deitsch vs. Wiggins, 15 Wallace, 539, errors, like exceptions in a bill of exceptions, must be specifically assigned.

Black vs. Darling, 140 U. S. 234.

Mining Co. vs. Fraser, 130 U. S. 611.

Phoenix Life Ins. Co. vs. Raddin, 120 U. S. 183.

In Chicago Etc. Co. vs. Moffit, 75 Ill. 524, where the record contained no specific assignment of error, the Court pertinently remarked "counsel must not operate a drag net and ask the Court to do the sorting." As counsel for the appellee, we object to going into the sorting business through the record which contains over 200 pages, and ask that this Court affirm the decision of the lower Court.

Should the Court, however, desire to examine this record for any plain errors that may appear, we desire to submit the following:

STATEMENT.

The Mesa Canal Company was organized in 1878 and completed in 1879 as shown by the testimony of Pomeroy, page 130 and Lewis, page 136. It was one of the first canals built in the valley. The water was located in the Salt River, and the canal was built for the purpose of irrigating lands owned and controlled by the stockholders of the company. The shares of stock were about 300 and never have been increased. From 1878 until 1891 this canal with all its laterals and ditches was operated by the owners of said stock who were users of said water for their own benefit. The main canal extended about 15 miles on the south side of the Salt River in Maricopa County, Territory of Arizona.

On January 10th, 1891, A. J. Chandler, assignor of the Consolidated Canal Company, appellant, entered into a contract with the Mesa Canal Company, which contract is plaintiff's exhibit "A" found on pages 12-13-14 and 15 of the record herein.

This contract provides that A. J. Chandler and his successors shall have forever certain rights and privileges, upon terms and conditions therein expressed, to the upper end of said canal, to wit; fro mthe place where the water was taken from the Salt River down to a point on said canal about 7½ miles below said place designated as the Ayres Head Gate. Among other privileges, he should increase the capacity of said canal, not to exceed 40,000 inches of water, miners' measurement, nor less than 10,000 inches. It it acknowledged that the capacity, at that time, of said canal was 7,000 inches, miners' measurement, and it was agreed that he should deliver that amount of water at the Ayres Head Gate to the stockholders of the Mesa Canal Company, who should own and operate the canal below that point, for the sum of $8.75 per share of stock per year. This enlargement of the size and dimensions and capacity of said canal above said point by appellant, was to be done at appellant's expense, and said agreement provided specifically that it was to be done "*without in any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal and the water flowing through said canal, except as hereinafter provided.*"

Appellant took possession under said contract of said portion of said canal, and ever since has been and now is in possession of said portion of said canal, not only to the point designated as Ayres Head Gate, but extended its possession about one half of a mile below said Ayres Head Gate to a point where it established a division gate, as shown by the testimony of many witnesses in the record. Below in appellee's canal appellant established its barley crusher five feet below the surface of the land in that immediate vicinity.

ARGUMENT.

It is apparent that the consideration to be derived from this contract on the part of appellant was the use of the

extra amount of water to be developed and carried in canal above said point mentioned in said contract, and the $8.75 per share that it was to receive from the stockholders of the Mesa Canal Company per year. In order to receive the first, it would be necessary to find purchasers for the extra amount of water developed. It is fair to conclude that this extension of one half of a mile could be for no other purpose than to compel land owners on each side of said canal for miles in each direction to purchase the extra water developed by said appellant. It also explains, as I shall illustrate further along, why at the point where the 7,000 inches of water are delivered, the appellant dropped the water into the canal five feet below the surface of the adjoining land and asked the Court to retain it there, so that at least two miles below said delivery, no water so delivered could be used upon the surface of said land for irrigating purposes.

This water was located for agricultural purposes only; no other use was contemplated or specified between the parties in said agreement. If the appellant raised the grade of said canal by its reconstruction, such elevation should inure not only to the benefit of the Consolidated Canal Company, but also to the appellee. We deny any right or authority under or by virtue of said contract, or by any agreement, for the plaintiff to establish any water power or machinery on or along said canal or at said division gate, and if any such water-power was developed or machinery placed therein, it was without right or authority and against the rights of appellee, and an intrusion and trespass upon appellee so far as it would interfere in any way with the proper irrigation of the lands belonging to the stockholders of the Mesa Canal Company.

It is admitted that appellee maintains a check or dam some 75 or 100 feet below where the water is delivered to them in said canal, and that the water backs up against the water fall and destroys the water power used by ap-

pellant in propelling machinery, but the evidence shows that it was a temporary check or dam for the purpose of forcing water into a lateral ditch in order to irrigate the lands owned and managed by the stockholders of the Mesa Canal which lie under the Mesa Canal below the division gates. The evidence shows that said check was reasonable in height, and was necessary to properly irrigate the lands of said defendant stockholders, and that appellee in putting in said dam, in no way violated the contract between the parties hereto, and was thereby enabled to use the water upon the lands upon which it had originally been used before said contract was entered into and for which the water was originally appropriated from the Salt River.

(Folios 250, 257 and 265).

The record shows that on the 11th, 12th and 14th days of December, 1896, this case was tried before his honor, A. C. Baker, Judge of the Third Judicial District of this Territory and Chief Justice of the Territory, and submitted to the Court, and on the first day of March, 1897, the Court being fully advised in the premises, and after having personally inspected said canal system at and adjacent to the division gate and water power connected therewith, said Judge denied an injunction as prayed for in the complaint and decreed that plaintiff take nothing by his action. (Page 16, folio 30 of record.)

The testimony of W. A. McDonald, found on page 171 of the record, as well as the testimony of many other witnesses, both for the plaintiff and the defendant, in the Court below, would tend to show that the water wheel and power put in below the division gate in that part of the canal controlled by the appellee, was of no practical use, of little value and worthless in every respect for the purpose for which it was constructed, and that it was a pretext for the appellant to prevent the use of water on the surface of the lands in that vicinity. Whether this is true or not, it is immaterial so far as the right of appellee to use the water at the level at which the delivery is made is concerned. It is stipulated in the agreement between the

the parties hereto that before the appellant is entitled to receive or use any water through the canal, it must deliver the 7,000 inches of water to appellee. It expressly denies to the appellant any right to the use of this water either to turn wheels, irrigate lands, or for any other purpose until it is delivered, and we take it that after it is delivered appellant has no authority or right to use it.

The evidence shows that the water had been raised by the check complained of, not five feet, or to the level of the water above the division gate, but about 3½ feet, not to the level of the water remaining in appellant's canal at that point. It strikes us as being fair and equitable that the water should be delivered to the Mesa Canal Company at the elevation of the enlarged canal at the point of delivery.

His honor, Associate Justice Doan, in rendering the opinion of the Supreme Court of the Territory of Arizona in this case on this point, uses the following language: (Folio 369)
"While the appellee might not be able to compel the delivery at such elevation without express agreement, it would be unjust and inequitable without an express stipulation to that effect in the agreement, to compel the appellee to not only receive its water, but to continue to use it at an elevation five feet lower than the rest of the water that had been carried that far in the same canal, simply to accelerate the flow of water and thus increase the carrying capacity of the canal in the interest of the other contracting party. The slight difference thus caused in the carrying capacity of the appellant's canal would seem to have been properly held by the lower Court to be insufficient grounds to justify in the proper and advantageous use of the water in its own canal by appellee, since the elevation to which it was thus raised did not exceed the level at which it had been carried to this point in the canal which was the common carrier for the water of both parties."

The plain question in this case is this: Are the stockholders in the Mesa Canal to be compelled to receive water at a level that makes it worthless to them, water which they paid appellant for the delivery of, water which they have located and developed and have been using since 1878, and the title to which they have sacredly guarded by night and day all this time? We think not. If that were true, owners of canals, by putting in water wheels at places of delivery of water to water consumers and stockholders, could deliver water at a lower level than the surface of the lands in that immediate vicinity, and compel consumers either to purchase water from them at another point or abandon their farming lands. No authorities are cited in support such a theory, and I apprehend no court would promulgate such a doctrine by such decision.

Our Arizona statutes, general section 3203, provide that the right to use water appropriated from the natural streams of the Territory for irrigation purposes shall be preferable to all others. Whether this statute is in conformity with the United States law or not, the legislatures of the Territory recognize water appropriations from natural streams in a broad sense for irrigating purposes. In this particular instance it is appropriated for that purpose and no other. It still flows through the Mesa Canal to the stockholders and water consumers who originally appropriated and located said water, and such users, I maintain, have the right to receive the water so appropriated at a level that will efficiently water their lands. And I maintain that if the division gate of the Consolidated Canal Company is too low, and the grade of the ditch above it is too low to allow the stockholders of the Mesa Canal Company to get the proper service at a proper level for the land they irrigate, a Court of Equity should, upon proper application, compel the Consolidated Canal Company to elevate the division gate to a proper level and grade their ditch in conformity thereto so that the water could be used effectively by such appropriators.

W. A. McDonald testifies on page 171, folio 321, that after the land of A. J. Chandler was condemned and the new Mesa ditch constructed, the directors met at the division gates with A.J.Chandler and proposed to the Consolidated Canal Company to put a flume in above the division gates to supply their lateral ditch with the water they paid the Consolidated Canal Company for delivering, and his testimony is not disputed as to that point, so that the alleged water power might be preserved. This proposition A. J. Chandler on behalf of the Consolidated Company flatly refused. This testimony alone should be sufficient to this Court, to affirm the decision of the Courts below which denied the appellant the injunction prayed for. It does away with the theory of the usefulness of the machinery placed by the appellant below the division gates and its practical utility unless it be upon the theory that it served a practical purpose, in compelling appellee to receive water at a level which made it impossible to use it upon their lands except they put in pumping plants along their canal below the division gates.

Dams and checks along water-courses are the only means by which water is turned from its regular channel and utilized. If all checks and dams were taken out of streams, canals and ditches irrigations would cease. Checks and dams are absolutely necessary in all systems of irrigation, commencing with the dam in the river where the water is originally located and turned from its natural course to the bordered lands in the cultivated fields. The appellee used no unusual means in putting in the check complained of to get its water on its land—the common and usual means of all irrigation.

The questions of fact which were determined by the trial judge in this case and either determined by the lower Court in favor of the appellee or such issues as were determined to be immaterial to the trial of this case, I apprehend this Court will not be disposed to disturb.

Finally we conclude that the Consolidated Canal Company undertook to compel the stockholders owning lands in the vicinity of the division gates of its canal to buy water from them instead of using the water they had already purchased from appellant, and failing to convince the lower Court of this most remarkable equity which it has so persistently claimed in the lower Courts, it now appeals to this Court for redress. We submit that the record of this cause shows both the trial Court and the Supreme Court below to have been both careful and just, and that ample reasons were presented to them for denying the injunction, and we ask that the judgment of the Supreme Court of the Territory of Arizona be affirmed.

Most respectfully submitted,

C. M. FRAZIER ~~and~~
~~FRAZIER, McCORMICK & WESCOTT,~~
~~Attorneys for Defendant and Appellee.~~
Rufus C. Garland
W. W. Wright, Jr.
Attorneys for Appellee

CONSOLIDATED CANAL COMPANY *v.* MESA CANAL COMPANY.

APPEAL FROM THE SUPREME COURT OF THE TERRITORY OF ARIZONA.

No. 200. Submitted March 15, 1900. — Decided April 9, 1900.

This court, in view of the finding of the court below as to the influence of the dam placed by the Mesa Company upon the flow of water in the canal of the Consolidated Company, is concluded as to the question of fact.

An injunction will not issue to enforce a right that is doubtful, or to restrain an act, the injurious consequences of which are doubtful.

The dam built by the Mesa Company although it had the effect of raising the flow of water in its canal so as to destroy the water power obtained by the Consolidated Company through the construction of its canal, was not an infringement of the rights secured to the Consolidated Company under the contract set forth in the statement of the case.

THIS case comes on appeal from a decision of the Supreme Court of the Territory of Arizona, 53 Pac. Rep. 575, affirming

a decree of the District Court of Maricopa County in favor of the defendant in a suit brought by the appellant to restrain the defendant from maintaining in its canal a dam in such a way as to impede the flow of water in appellant's canal, or to destroy a certain water power claimed by appellant.

The facts as shown by the findings and statement prepared by the Supreme Court are as follows: The appellee was the owner of the Mesa Canal. On January 10, 1891, it made a contract with A. J. Chandler, who subsequently transferred his rights thereunder to the appellant. The material portions of the contract are as follows:

"This article of agreement, made and entered into this 10th day of January, A. D. 1891, by and between the Mesa Canal Company, a corporation duly organized and legally existing under and by virtue of the laws of the Territory of Arizona, having its principal office and place of business at Mesa city in the county of Maricopa and Territory of Arizona, party of the first part, and A. J. Chandler of the city of Phœnix, in the county and Territory aforesaid, party of the second part, witnesseth:

"That, whereas, the said party of the first part is an irrigating corporation, and as such is now the owner operating the Mesa Canal in said county and Territory.

"And, whereas, said party of the second part desires to increase the size and capacity of said canal between the point in Salt River where the water is now taken out, or by consent of the directors of the Mesa Canal Company may hereafter be taken out, and a point in said Mesa Canal known as 'Ayers' head gate,' so as to increase the flow of water through said portions of said canal as aforesaid, and for the purpose of the party of the second part, his associates and assigns, obtaining water thereby through said canal, and in order to have the said canal increased in size, dimensions and capacity without cost or expense to said party of the first part, and without in any way interfering with the rights, titles, interests nor privileges of said party of the first part in and to said canal and the water flowing through said canal, except as hereinafter provided.

* * * * * * * *

"Now, therefore, the Mesa Canal Company, party of the first part, for and in consideration of the sum of one dollar to it in hand paid by the party of the second part, the receipt whereof is hereby acknowledged, and for the further consideration and purposes herein contained and expressed, does for itself and for its successors or assigns hereby grant unto the said A. J. Chandler, his associates, heirs or assigns, forever, the following rights and privileges upon the terms and conditions herein expressed, viz.:

"That the said A. J. Chandler, his associates, heirs or assigns, shall have the right and privilege of entering upon any and all of the following portions of said Mesa Canal at any time prior to the first day of March, A. D. 1891, for the purpose of widening and enlarging and increasing the size and capacity of said Mesa Canal between the point in Salt River where the water is now or may hereafter be taken out for said canal, and a point on said canal known as 'Ayers' head gate,' and enlarge and increase the size and dimensions of the main dam and head gates at the point of commencement of said canal in Salt River, and enlarge and increase the size and capacity of said Mesa Canal so that the same when so enlarged and increased in size shall have a carrying capacity in addition to its present carrying capacity not exceeding forty thousand inches of water miners' measurement, nor less than ten thousand inches of water miners' measurement, and said enlargement shall be fully made and completed by the thirtieth day of December, A. D. 1891. The present carrying capacity of said Mesa Canal for the purpose of this agreement shall be seven thousand inches miners' measurement.

"All the cost and expense of enlarging and increasing the size of said dam, head gate and canal as aforesaid shall be borne and paid by the party of the second part, his associates, heirs or assigns, forever. And said enlargement shall be made without in any way interfering with any of the rights, titles, interests or privileges of said party of the first part in and to the said canal and the water flowing through said canal, except as hereinafter provided.

"The party of the first part hereby reserves the right to fur-

ther enlarge said portion of the Mesa Canal whenever they deem it necessary to do so, provided such enlargement shall not interfere with or lessen the rights or privileges herein granted to the party of the second part, his associates or assigns.

* * * * * * * *

"Said party of the second part, his associates or assigns, shall in enlarging said main dam, head gates and canal as aforesaid, in all respects enlarge said dam, head gates and canal in a good, substantial and workmanshiplike manner, according to the most approved methods of constructing and building irrigating canals.

"All suits, liabilities, costs, expenses or judgments, and all damages or loss incurred or sustained by the party of the first part caused by said enlargement, shall be borne by the party of the second part, his associates or assigns forever, and all suits or proceedings against the party of the first part by reason of said enlargement to be defended at the expense of the party of the second part.

"It is expressly understood and agreed by the parties hereto, their successors or assigns, that at all times when there is an abundance of water in Salt River liable to appropriation and flowage through said canal when so enlarged, then and at all such times the said party of the first part shall have the right to use from said canal in addition to the amount hereinbefore specified as the capacity of said canal two thousand inches of water, miners' measurement.

"The management and control of the canal between the point known as 'Ayers' head gate' to and including the dam in Salt River when so enlarged as aforesaid shall be in the party of the second part, his heirs, associates or assigns. Provided, that the party of the second part, his heirs, associates or assigns, shall before he or they are entitled to receive or use any water through said canal, first deliver to the party of the first part, their heirs or assigns, at the point in said Mesa Canal known as 'Ayers' head gate,' and shall continue to deliver, the seven thousand inches of water miners' measurement above expressed as the carrying capacity of said Mesa Canal, or such portion thereof as may be apportioned to said Mesa Canal by decree of any court. Provided, the stockholders who are now using or may

hereafter use water above the 'Ayers' head gate' shall have their water delivered to them as at present above the 'Ayers' head gate' aforesaid, or said stockholders shall have their water delivered to them at the 'Ayers' head gate' with the other stockholders, as they may demand. Provided, further, that the water shall be delivered to the party of the first part after the completion of said canal as aforesaid for a period of five years without cost to the party of the first part, their successors or assigns, and thereafter for a sum not exceeding three dollars per share per year forever, to be paid for in the same manner as they now pay for the same.

* * * * * * * *

"Provided, further, that if the said party of the second part, his associates, heirs or assigns, shall neglect to deliver water as agreed herein, or shall fail to carry out any of the terms of this agreement, and shall be notified by the directors of the Mesa Canal Company of such failure or neglect to carry out the terms of this agreement, and shall still neglect to carry out the terms of this agreement for a period of ten days thereafter, or in such case as a break in the canal, head gates and dam whereby the water is turned out for a period of five days, then and at all such times it is hereby agreed by the party of the second part, his heirs, associates or assigns, that the directors of the Mesa Canal Company shall have the right and power to take full charge and control of said enlarged portion of said Mesa Canal without process of law, and the same shall become the property of the Mesa Canal Company and shall so remain until the party of the second part, his associates, heirs or assigns, shall fully comply with the term and requirements of this agreement, and then shall revert back to the party of the second part, his associates, heirs or assigns, and shall be and remain in the party of the second part, his associates, heirs or assigns, so long as the terms of this agreement shall be by them complied with.

"This agreement shall not give or convey to the party of the second part, his associates, heirs or assigns, any title or ownership in or to the capital stock of said Mesa Canal Company, but shall only convey such privileges and rights as are herein mentioned."

Statement of the Case.

The appellant, as the transferee from Chandler, enlarged and reconstructed the Mesa Canal down to a place called the "Division Gates," which point had by mutual consent been substituted for Ayers' head gate as the point of division of the waters, and delivery by the appellant to the appellee of the water to which the latter was entitled. In thus enlarging and reconstructing the canal the appellant raised the grade thereof for the purpose of carrying the water at a higher elevation, thereby enabling the canal to cover more and other lands, and at the point where the division gates were located the elevation was about five feet above the grade of the canal before reconstruction, and by the construction of those gates at that point the appellant delivering the water to the appellee secured a fall of five feet in the water thus delivered.

Other findings were as follows:

"After appellant had delivered the water in the manner aforesaid for some years, the appellee built a dam in its canal a short distance below the division gates that raised the water and caused it to flow through a lateral ditch, which enabled the appellee to irrigate some lands on which it had not been able to place water through its canal from its former elevation. The effect of this raise in the water was to reduce the fall at the division gates.

"After appellee had built its dam and backed up the water, as aforesaid, appellant had constructed a water wheel and a mill for grinding grain to be driven thereby, and had erected them at the division gates, so that the wheel was turned by the water as it fell from the division gate into the Mesa Canal, a distance of about five feet. Afterwards appellant increased the height of the dam that it had formerly built to such an extent that it raised the surface of the water and backed the same up against the division gate in such manner as to destroy three and one half feet of the five feet fall and totally destroyed the water power.

"The water raised by the dam and the water affording the water power thus destroyed is the 7000 inches of water which appellant is obligated by the terms of the agreement afore-

mentioned to first deliver to the appellee before said appellant is entitled to receive or use any water through said canal.

"A further result of the erection of the water in appellee's canal below the division gates was to very slightly, if at all, impede the flow of water in appellant's canal above the division gates and thereby detract very slightly from the carrying capacity of appellant's canal.

"The cost of the reconstruction of the canal from Ayers' head-gate to the division gates exceeded ten thousand dollars, and the water power created at the fall was equal to about forty horse power."

Mr. John D. Pope for appellant.

Mr. C. M. Frazier, *Mr. Rufus C. Garland* and *Mr. W. W. Wright, Jr.*, for appellees.

Mr. Justice Brewer, after stating the case, delivered the opinion of the court.

While the title to any portion of the Mesa Canal may not have been changed by this contract, yet for convenience we shall speak of that portion thereof under the control of the appellant as its canal, and of the balance as the appellee's canal.

In view of the finding of the Supreme Court we need not stop to consider any question in respect to the influence of the dam placed by appellee upon the flow of water in appellant's canal, and this notwithstanding the fact that in the trial of the case much of the testimony, pro and con, was in reference to that matter. We are concluded as to the question of fact by the finding, and it is familiar law that injunction will not issue to enforce a right that is doubtful, or to restrain an act the injurious consequences of which are merely trifling. *Parker* v. *Winnipiseogee Lake Company*, 2 Black, 545, 552.

We pass, therefore, to the only substantial question, which is, whether the dam built by appellee, having the effect as it did of raising the flow of water in its canal so as to destroy the water power obtained by appellant through the construction of

its canal, was an infringement of the rights secured to appellant by the contract of January 10, 1891. The appellant seems to be of the opinion that by that contract it had a right to raise its canal to such an elevation as it saw fit while the appellee had no such liberty. We search the contract in vain for any express stipulation to that effect. If the appellant had a right to raise the grade of its canal five feet, we see nothing to forbid the appellee to raise its grade to the same height. There is no reference in the contract to water power. Obviously the only matter then contemplated was a supply of water for irrigation purposes. The appellee is styled "an irrigating corporation, and as such . . . operating the Mesa Canal." The expressed purpose of appellant was "obtaining water thereby through said canal." The water power was evidently an afterthought, suggested by the condition of things when the appellant had finished the reconstruction of its canal. The appellant must point to some stipulation in the contract which the action of the appellee has broken, for the entire right given by it to the appellant is declared to be "without in any way interfering with the rights, titles, interests or privileges of said party of the first part in and to said canal, and the water flowing through said canal, except as hereinafter provided."

No right passed to the appellant except that which was expressly named. All other rights, titles, interests or privileges were retained by the appellee. The appellant was to deliver the 7000 inches of water out of the enlarged canal, and the appellee was to receive and pay therefor. The appellant was to increase the carrying capacity of the canal not less than 10,000 nor more than 40,000 inches, and this surplus water it had a right to use. But the appellee reserved the right if it saw fit at any time to still further enlarge the carrying capacity of the canal, and the only limitation in respect to such enlargement was that it should not "interfere with or lessen the rights" granted to the appellant. What were those rights? Obviously the right to take and use the surplus over 7000 inches of water flowing through the canal, as enlarged by appellant.

It may be that neither party to this contract could change the grade of its canal so as to compel the other to make a like

change of grade. Thus, when the appellant, in the first instance, enlarged and reconstructed its canal, it raised the grade five feet. If it had seen fit to lower the grade five feet, instead of raising it, doubtless in order to fulfil its contract of delivery it would have had to provide some pumping arrangements, and could not have demanded that the appellee lower its grade five feet in order to receive the water. And so it may be that the appellee could not now raise its grade ten feet and then demand that the appellant either raise its grade five feet more or put in pumping works to insure the delivery of the water. But as to any action which does not interfere with the delivery of water by the appellant to the appellee, there is nothing in the contract to restrain at least the appellee from doing as it pleases with its canal.

It does not appear that the appellee was acting maliciously and for the mere sake of injuring the appellant. On the contrary, its purpose as disclosed was to irrigate lands which it had not theretofore been able to irrigate from its former elevation, and we know of no reason why it had not a right to do so. It made no stipulation as to the lands which it should irrigate. It had the same right which it had before the contract of enlarging or reducing the number of acres reached by the flow of its water. It does not appear that the lands which it was seeking to irrigate by raising the elevation in the upper part of its canal could have been reached in any other way, and it was not bound to desist from any enlargement of its own business for the mere benefit of the appellant or to enable the latter to enjoy something which was not conveyed to it by the terms of the contract.

We need not stop to inquire what are the rights of separate appropriators of water, in the absence of a contract. We are dealing with those which grow out of this contract, bearing in mind that all rights are reserved to the appellee which are not in terms granted to the appellant. If 7000 inches of water was more than sufficient to supply the territory which it was then irrigating, there is nothing which forbade the appellee to enlarge that area, and in order to enable it to reach that larger area it might make any change in the construction of

its canal—at least any change which did not interfere with the free delivery of the water by the appellant.

We see no error in the decision of the Supreme Court of Arizona, and its judgment is

Affirmed.